4494	
1	IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA
2	IN AND FOR THE CITY AND COUNTY OF SAN FRANCISCO
3	BEFORE THE HONORABLE JOHN E. MUNTER, JUDGE
4	DEPARTMENT NO. 505
5	
6	LESLIE J. WHITELEY AND)
7	LEONARD WHITELEY,)
8	PLAINTIFFS,)
9	VS.) NO. 303184
10	RAYBESTOS-MANHATTAN, INC., ET)
11	AL.,
12	DEFENDANTS.)
13)
14	
15	REPORTER'S TRANSCRIPT OF PROCEEDINGS
16	MONDAY, FEBRUARY 28, 2000
17	(VOLUME 32, PAGES 4494-4630)
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23	REPORTED BY: JUDITH ANN OSSA, CSR 2310
24	OFFICIAL REPORTER
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     APPEARANCES:
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     FOR THE PLAINTIFFS:
 5
           WARTNICK, CHABER, HAROWITZ & TIGERMAN
           BY: MADELYN J. CHABER, ESQ.
 6
                ROBERT BROWN, ESQ.
           101 CALIFORNIA STREET, SUITE 2200
 7
           SAN FRANCISCO, CALIFORNIA 94111-5802
 8
    FOR THE DEFENDANT PHILIP MORRIS INCORPORATED:
 9
           SHOOK, HARDY & BACON LLP
           BY: DAVID K. HARDY, ESQ.
10
                 GERALD V. BARRON, ESQ.
                LUCY E. MASON, ESQ.
           ONE MARKET, STEUART TOWER, NINTH FLOOR
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           SAN FRANCISCO, CALIFORNIA 94105-1310.
12
      FOR THE DEFENDANT R.J. REYNOLDS TOBACCO COMPANY:
13
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	WOMBLE, CARLYLE, SANDRIDGE & RICE
14	BY: JEFFREY L. FURR, ESQ.
	200 WEST SECOND STREET
15	WINSTON-SALEM, NORTH CAROLINA 27101
16	HOWARD, RICE, NEMEROVSKI, CANADY,
	FALK & RABKIN
17	BY: H. JOSEPH ESCHER III
Ι/	
1.0	THREE EMBARCADERO CENTER, 7TH FLOOR
18	SAN FRANCISCO, CALIFORNIA 94111-4065
	FOR DEFENDANT METALCLAD INSULATION CORPORATION:
20	MISCIAGNA & COLOMBATTO
	BY: GREGORY S. ROSSE, ESQ.
21	27 MAIDEN LANE, 4TH FLOOR
	SAN FRANCISCO, CALIFORNIA 94108
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4496	
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_	EXAMINATION OF DEFENSE WITNESSES
2	WITNESS NAME

PAGE 3 4497	CLAUDE MARTIN, PH.D
4498	CROSS-EXAMINATION (RESUMED)
4 4 4521	REDIRECT EXAMINATION
4526	RECROSS-EXAMINATION
5	WILLIAM WECKER, PH.D
4532	WILLIAM WECKER, PR.D
6 4532	DIRECT EXAMINATION
	DIRECT EXAMINATION (CONTINUED)
4559 7 4604	CROSS-EXAMINATION
4004	REDIRECT EXAMINATION
4621 8	
4625 9	READING OF THE DEPOSITION OF KIN JUNG, M.D
10	VIDEOTAPE SHOWING AND READING OF DEPOSITION OF REBECCA L. ENLOW

4626 11	EXHIBIT			DEFI	ENSE EΣ	KHIBITS		
PAGE 12	DEFENCE	EXHIBITS	2 6274	6075	6076	5 6 6 2 7 7	7	
13 4556	DEFENSE	EXHIBIT				FICATIO		
	DEFENSE	EXHIBIT						
14 4567			MARKED	FOR	IDENTI	IFICATIO)N	 • •
	DEFENSE	EXHIBIT						
15 4568			MARKED	FOR	IDENTI	IFICATIO)N	 • •
	DEFENSE	EXHIBITS	S 6280 8	£ 628	31			
16 4578			MARKED	FOR	IDENT	IFICATIO)N	
	DEFENSE	EXHIBITS	S 6282 8	£ 628	33			
17 4583			MARKED	FOR	IDENT	IFICATIO)N	
	DEFENSE	EXHIBIT						
18 4587			MARKED	FOR	IDENT	IFICATIO)N	 • •
	DEFENSE	EXHIBIT	6285					

19 4597			MARKED	FOR	IDENTIFICATION
20 4600	DEFENSE	EXHIBIT		FOR	IDENTIFICATION
21 4600	DEFENSE	EXHIBIT	020,	FOR	IDENTIFICATION
22 4624	DEFENSE	EXHIBIT		FOR	IDENTIFICATION
23 4626	DEFENSE	EXHIBIT		FOR	IDENTIFICATION
24 4626 25 26 27 28	DEFENSE	EXHIBIT		FOR	IDENTIFICATION
4497 1 2 3	MONDAY,	(THE	FOLLOW	ING I	9:50 A.M. PROCEEDINGS WERE HELD IN THE HE PRESENCE OF THE JURY)

4 5	THE COURT: GOOD MORNING, JURORS. I APOLOGIZE FOR THE DELAY. I WAS DOING SOME WORK WITH THE LAWYERS.
6	OKAY.
7	MS. CHABER.
8	MS. CHABER: YES, YOUR HONOR. BEFORE WE GET
9	STARTED WITH DR. MARTIN, I WOULD ASK THE COURT TO READ A
10	STATEMENT TO THE JURY REGARDING THE PLAINTIFF.
11	THE COURT: OKAY. IS THERE ANY OBJECTION TO
MY	
12	DOING THAT AT THIS TIME, TO READ THAT STATEMENT AT THIS
13	TIME?
14	MR. FURR: NO, YOUR HONOR.
15	MR. HARDY: NO, YOUR HONOR.
16	MR. ESCHER: NO, YOUR HONOR.
17	THE COURT: JURORS, HERE IS THE BRIEF
18	STATEMENT:
19	"PLAINTIFF LESLIE WHITELEY WILL BE UNABLE TO
20	RETURN TO THE COURTROOM DUE TO HER HEALTH
21	CONDITION. YOU MUST NOT HOLD THAT FACT AGAINST
22	ANY PARTY IN DECIDING THIS CASE."
23	THAT'S THE BRIEF STATEMENT.
24	OKAY. MS. CHABER, YOU MAY PROCEED. DR. MARTIN
25	IS BACK ON THE WITNESS STAND.
26	FURTHER TESTIMONY OF

27 CLAUDE MARTIN, PH.D., 28 A WITNESS CALLED ON BEHALF OF THE DEFENSE, HAVING BEEN 4498 1 PREVIOUSLY DULY SWORN, TESTIFIED FURTHER AS FOLLOWS: CROSS-EXAMINATION (RESUMED) BY MS. CHABER: Q. GOOD MORNING, DR. MARTIN. 5 A. GOOD MORNING. Q. IF YOU CAN'T HEAR ME, PLEASE LET ME KNOW. I'M 6 IN 7 THE PROCESS OF BEING ABOUT TO LOSE MY VOICE. 8 A. SORRY. Q. MAYBE NOT. 9 10 DR. MARTIN, WOULD YOU AGREE THAT IT IS POSSIBLE 11 THAT ADVERTISING COULD INFLUENCE BRAND CHOICE AMONG TEENAGE 12 SMOKERS? A. YES, I THINK THAT'S POSSIBLE. 13 14 Q. AND WOULD YOU AGREE THAT A BRAND COULD FULFILL Α 15 NEED THAT A TEENAGER MIGHT HAVE WITH RESPECT TO THEIR IMAGE? 16 A. I HAVE SOME DOUBTS A LITTLE BIT ABOUT THAT, BECAUSE OF THE INFORMATION AND DATA THAT I HAVE SEEN FROM 17 18 THE UNIVERSITY OF MICHIGAN STUDY ON THAT SUBJECT.

Q. DO YOU RECALL BEING DEPOSED IN MISSISSIPPI? 19 20 A. I RECALL BEING DEPOSED IN THE CASE OF THE 21 ATTORNEY GENERAL OF MISSISSIPPI, YES. 22 Q. YOU MIGHT HAVE BEEN BACK IN MICHIGAN, BUT IT WAS 23 FOR A CASE THAT WAS PENDING BY THE ATTORNEY GENERAL OF THE 24 STATE OF MISSISSIPPI; CORRECT? 25 A. YES, THAT'S CORRECT. 26 AND DO YOU RECALL MAKING THE FOLLOWING 27 STATEMENT --28 MR. ESCHER: EXCUSE ME, YOUR HONOR. COULD WE 4499 1 GET A COPY OF THAT? THE COURT: IF THERE IS AN OBJECTION TO THE FORM, I WOULD SUSTAIN. 3 4 MS. CHABER: I THINK I'M SHORT ONE, YOUR HONOR. 5 THE COURT: IF YOU WANT TO READ SOMETHING, WHY 6 DON'T YOU TELL US THE LINES AND THE PAGES. IF THERE'S NO 7 OBJECTION, I DON'T NEED A COPY. MS. CHABER: OKAY. PAGE 127, LINES 13 TO 18. 8 9 MR. ESCHER: I DON'T HAVE ANY OBJECTION, YOUR 10 HONOR.

11 THE COURT: YOU MAY READ. 12 MS. CHABER: "QUESTION: WOULD THE BRAND OF A 13 CIGARETTE THEY CHOOSE FULFILL SOME NEED THAT THEY 14 HAVE? 15 "ANSWER: YES. IT'S QUITE POSSIBLE THAT A BRAND 16 OF A CIGARETTE COULD FULFILL A NEED THAT SOMEBODY 17 HAD, YES." 18 Q. IS THAT YOUR ANSWER TO THE QUESTION ASKED OF YOU IN MISSISSIPPI? 19 20 A. YES, IT IS. 21 Q. ARE YOU AWARE, SIR, THAT MARLBORO, CAMEL AND 22 NEWPORT ARE THE MOST HEAVILY ADVERTISED BRANDS OF 23 CIGARETTES? A. I BELIEVE THEY ARE. 25 Q. AND ARE YOU AWARE, SIR, THAT THOSE ARE THE MOST 26 FREQUENTLY USED CIGARETTES BY TEENAGERS? 27 MR. ESCHER: OBJECTION, YOUR HONOR. VAGUE AS TO 28 TIME. 4500 1 THE COURT: YES. AT WHAT POINT?

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2
                MS. CHABER: FROM THE 1970S TO THE PRESENT.
3
                THE WITNESS: I BELIEVE THAT THERE IS DATA
THAT
     I HAVE SEEN THAT WOULD INDICATE THAT, YES.
4
5
               MS. CHABER: Q. WOULD YOU AGREE, SIR, THAT
 6
     ADOLESCENCE IS A TIME OF IDENTITY FORMATION?
7
           A. I'M NOT AN EXPERT IN IDENTITY FORMATION BY
8
     ADOLESCENTS. I'M SORRY. I THINK THAT'S MORE OF A CHILD
9
     PSYCHOLOGY DISCIPLINE.
          Q. WELL, SIR, IN ORDER TO DETERMINE WHETHER OR NOT
10
11
     ADVERTISING AND PROMOTIONAL THINGS APPEAL TO CHILDREN,
12
     WOULDN'T YOU NEED TO KNOW WHAT IDENTITY ISSUES CHILDREN
13
     WOULD HAVE IN ADOLESCENCE?
14
               MR. ESCHER: OBJECTION, YOUR HONOR. VAGUE.
15
     ALSO, BEYOND THE SCOPE OF THE DIRECT EXAMINATION.
16
                THE COURT: OVERRULED.
17
                THE WITNESS: I THINK I BETTER HAVE IT READ
BACK
18
     BECAUSE OF --
19
                THE COURT: THAT'S FINE.
                THE WITNESS: -- WHAT'S GONE ON.
20
                THE COURT: IF YOU NEED TO HAVE IT READ BACK,
21
   DON'T HESITATE. WE'D RATHER HAVE THE QUESTION READ BACK
22
23
     RATHER THAN HAVE YOU HAVE QUESTIONS ABOUT IT. THERE IS
24 NOTHING WRONG WITH YOU HAVING IT READ BACK.
25
                THE WITNESS: THANK YOU, YOUR HONOR.
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THE WITNESS: I SUPPOSE, IF YOU WERE GOING TO 27 28 FRAME AN ADVERTISING CAMPAIGN THAT WAS DIRECTED AT CHILDREN, 4501 1 YOU MIGHT WANT TO KNOW SOMETHING ABOUT CHILDREN AND WHAT WOULD APPEAL TO THEM. MS. CHABER: Q. AND I SUPPOSE, IF YOU WERE GOING TO DIRECT AN ADVERTISING CAMPAIGN TO CHILDREN, YOU 5 WOULD LOOK AT THE KINDS OF THEMES THAT APPEAL TO CHILDREN, 6 WOULD YOU NOT? 7 A. I SUPPOSE IF YOU WERE GOING TO WRITE ADVERTISING 8 FOR CHILDREN, YES, I GUESS YOU WOULD LOOK AT THE THEMES THAT 9 MIGHT APPEAL TO THEM. 10 Q. AND ONE OF THE THEMES THAT MIGHT APPEAL TO

11 CHILDREN IS A THEME OF INDEPENDENCE?
12 MR. ESCHER: OBJECTION. LACK OF FOUNDATION.
13 VAGUE, YOUR HONOR.
14 THE COURT: WELL, WHEN YOU SAY "LACK OF

15 FOUNDATION," IF HE DOESN'T KNOW, HE CAN TELL US. AND IF HE

16 DOES, HE WILL TELL US. 17 I WILL OVERRULE. 18 THE WITNESS: THAT'S WHY I HAD MY RESPONSE 19 EARLIER ABOUT THE UNIVERSITY OF MICHIGAN STUDY, BECAUSE THEY SPECIFICALLY LOOKED AT INDEPENDENCE AND WHETHER OR NOT 21 INDEPENDENCE HAD A RELATIONSHIP TO IDENTIFICATION OF CIGARETTE SMOKERS. 22 AND AS IT TURNS OUT, INDEPENDENCE IS NOT A 23 MAJOR 24 IMAGE THAT IS ASSOCIATED BY HIGH SCHOOL SENIORS WITH CIGARETTE SMOKING OR SMOKERS. 25 26 MS. CHABER: Q. I DON'T THINK YOU QUITE MS. CHABER: Q. ANSWERED MY QUESTION, SIR. 28 A. I APOLOGIZE. 4502 1 Q. ARE THERE CERTAIN THEMES THAT APPEAL TO CHILDREN, SUCH AS THE THEME OF INDEPENDENCE? 3 A. IF YOU SAY SO. BUT MY PROBLEM WITH THAT IS THAT THERE IS SOME 4 5 INDICATION FROM THE DATA FROM THE UNIVERSITY OF MICHIGAN 6 WHICH WOULD INDICATE THAT THAT IS NOT A MAJOR FACTOR FOR CHILDREN, AT LEAST AS IT RELATES TO CIGARETTE SMOKING. Q. SIR, WOULD YOU AGREE THAT ADVENTURE-SEEKING IS

- A

 9 THEME THAT APPEALS TO CHILDREN?

 10 A. AGAIN, THE SAME PROBLEM I HAVE IS, BECAUSE OF THE

 11 UNIVERSITY OF MICHIGAN STUDY, AGAIN -- I MEAN, I'M TRYING TO

 12 BE RESPONSIVE TO YOU, BUT MY DIFFICULTY WITH IT IS THAT WHEN

 13 YOU SAY "ADVENTURE-SEEKING APPEALS TO CHILDREN," YOU
- REALLY

 14 ARE GETTING INTO THE CHILD PSYCHOLOGY AREA, AND THAT'S NOT
- 15 MY EXPERTISE.
- 16 Q. WELL, SIR, WOULD YOU BE INTERESTED TO HAVE KNOWN
- 17 WHETHER OR NOT R.J. REYNOLDS OR PHILIP MORRIS LOOKED AT WHAT
- THEMES APPEALED TO CHILDREN IN DEVELOPING THEIR MARKETING?
- 19 A. I'D LOOK AT IT -- I MEAN, WOULD IT BE OF INTEREST
- 20 TO ME? IT WOULD NOT BE. IT IS NOT WHAT I WAS STUDYING IN
- 21 PREPARATION FOR THIS CASE.
- 22 Q. SIR, I TAKE IT THEN THAT IF THERE WERE MEMORANDA
- 23 AND OTHER DOCUMENTS WITHIN R.J. REYNOLDS AND PHILIP MORRIS

24 THAT ANALYZED WHAT THEMES APPEALED TO CHILDREN, YOU WOULD 25 NOT CONSIDER THAT IN FORMING YOUR OPINION IN THIS CASE; 26 CORRECT? 27 I WOULD NOT CONSIDER IT IN FORMING MY OPINION Α. IN 28 THIS CASE FOR A NUMBER OF DIFFERENT REASONS, YES. 4503 AND, SIR, YOU'D AGREE, WOULD YOU NOT, THAT TO 1 2 SOME EXTENT, YOUNG SMOKERS WEAR THEIR CIGARETTES; IN OTHER WORDS, WEAR THE IDENTITY OF THE CIGARETTE? A. I'VE NEVER SEEN ANY RESEARCH ON THAT. 5 Q. YOU KNOW -- OKAY. YOU HAVEN'T SEEN RESEARCH ON 6 THAT. 7 YOU DO KNOW THAT CHILDREN, TEENAGERS IN 8 PARTICULAR, WEAR CERTAIN CLOTHING FOR THEIR IDENTITY? 9 A. WELL, I KNOW -- I KNOW THAT CERTAIN TEENAGERS DO 10 WEAR CLOTHING THAT MAY HAVE SOME MARK OR SOMETHING ON IT, 11 BECAUSE I SEE IT ON NOW MY OWN CHILDREN AND GRANDCHILDREN. THEY KEEP GIVING ME THINGS, IN FACT, THAT HAVE IT AT ON 12 THEM 13 TOO. 14 Q. SIR, YOU UNDERSTAND THAT CERTAIN STYLES OF DRESS, 15 ONE KID IMITATES ANOTHER KID IN STYLE OF DRESS?

- 16 MR. ESCHER: OBJECTION, YOUR HONOR. VAGUE AS TO 17 THE TERM "KID." 18 IT'S VAGUE, YOUR HONOR. THAT'S MY OBJECTION. 19 THE COURT: TELL US IS WHAT YOU MEAN BY "KID." 20 MS. CHABER: SOMEONE UNDER THE AGE OF 18. 21 THE WITNESS: WEARS CLOTHING IN IMITATION OF 22 ANOTHER PERSON WHO IS THE UNDER THE AGE OF 18? MS. CHABER: Q. THAT'S CORRECT. 23 A. FROM MY OWN OBSERVATION, I HAVEN'T REALLY 24 STUDIED 25 THAT. 26 BUT I MEAN, FROM MY OWN OBSERVATION, I SEE KIDS 27 WHO ARE DRESSED SIMILARLY, SURE. AND I SEE MY KIDS --WELL, 28 MY KIDS ARE KIND OF OLD NOW, BUT AT LEAST I HAVE ONE 4504 1 GRANDCHILD WHO IS PROBABLY IN THAT CATEGORY YOU'RE THINKING 2 OF. I SEE HIM WEARING CLOTHING THAT IS KIND OF IMITATIVE OF
- 3 WHAT OTHER KIDS WEAR.
- 4 Q. AND STYLE OF HAIR; THAT'S IMITATIVE OF WHAT

OTHER	
5	KIDS WEAR?
6	A. WELL, GEE, I'M NOT AN EXPERT ON HAIR STYLES OF
7	KIDS, BUT I DON'T KNOW. FROM MY OWN EXPERIENCE, I HAVE A
8	GRANDSON WHO'S GOT A BUZZ CUT. I'M NOT ONE OF THE
OTHER	
9	KIDS SEEMS TO HAVE LONG HAIR.
10	I'M NOT SURE ABOUT THAT, I SUPPOSE.
11	Q. SIR, HAVE YOU EVER LOOKED AT STRIKE THAT.
12	WOULD YOU AGREE, SIR, THAT SMOKING A CIGARETTE
13	FOR THE BEGINNER IS A SYMBOLIC ACT?
14	A. A SYMBOLIC ACT? I DON'T KNOW WHAT YOU MEAN BY
15	"SYMBOLIC ACT." I'M SORRY.
16	Q. AN ACT THAT SAYS, "I'M NO LONGER MY MOTHER'S
17	CHILD. I'M TOUGH, I'M AN ADVENTURER. I'M NOT A SQUARE."
18	A. THE DATA I'VE SEEN DOESN'T USE THOSE WORDS,
THAT	
19	TERMINOLOGY THAT YOU'VE JUST USED.
20	BUT THE DATA THAT I HAVE SEEN INDICATES THAT
THE	
21	TERMINOLOGY IS REBELLIOUSNESS THAT IS ASSOCIATED WITH THE
22	CIGARETTE SMOKING INITIATION.
23	Q. AND, SIR, HAVE YOU EVER LOOKED AT PHILIP MORRI
24	DOCUMENTS TO SEE WHETHER OR NOT THEY USED THAT TERMINOLOG
25	IN DETERMINING WHY ONE SMOKES CIGARETTES?
26	A NO THAVEN'T LOOKED AT ANY DOCUMENTS FROM

PHILI	P
27	MORRIS.
28	Q. YOU WERE NEVER SHOWN A 1969 MEMORANDUM ENTITLED
4505	
1	"WHY ONE SMOKES" THAT USES THAT LANGUAGE, THAT SMOKING IS
A	
2	SYMBOLIC ACT?
3	A. THIS IS A PHILIP MORRIS DOCUMENT?
4	Q. YES.
5	A. NO.
6	Q. WELL, SIR, HAVE YOU EVER LOOKED AT A 1975
7	MEMORANDUM OF R.J. REYNOLDS THAT LOOKS AT TEENAGERS AND
WHAT	
8	APPEALS TO TEENAGERS?
9	A. NO, I HAVE NOT.
10	Q. SIR, YOU ARE AWARE, ARE YOU NOT, THAT I'M
11	LOSING MY VOICE HERE THAT THERE ARE MARKETING
MEMOR	ANDA,
12	INTERNAL MEMORANDA FROM THE TOBACCO COMPANIES THAT INVOLVE
13	MARKETING TO CHILDREN? YOU ARE AWARE OF THAT; CORRECT?
14	MR. ESCHER: OBJECTION, YOUR HONOR. VAGUE AS
TO	
15	THE TERM "MARKETING TO CHILDREN."
16	THE COURT: SUSTAINED.
17	MS. CHABER: O. SIR, YOU ARE AWARE OF
	~

MEMORANDA 18 THAT ANALYZE THE NEEDS OF CHILDREN AND THE DIRECTION OF 19 ADVERTISING TOWARDS THOSE NEEDS THAT ARE INTERNAL TO THE 20 TOBACCO COMPANIES, ARE YOU NOT? 21 A. NO, MA'AM, I'M NOT AWARE OF MEMORANDA. 22 I AM AWARE, HAVING READ IN THE PRESS THAT THERE 23 ARE -- IN ONE CASE, IT WAS THOUSANDS. AND IN ANOTHER CASE Т 24 READ -- I GUESS IT WAS IN CONJUNCTION WITH THE MINNESOTA 25 ATTORNEY GENERAL CASE -- THAT THERE IS OVER A MILLION 26 DOCUMENTS THAT HAVE COME FROM VARIOUS CIGARETTE COMPANIES 27 THAT HAVE BECOME PUBLIC, SO TO SPEAK. 28 BUT THAT'S -- I'M NOT AWARE OF THE SPECIFIC 4506 1 MEMORANDA THAT YOU'RE TALKING ABOUT. Q. SIR, IS IT FAIR TO SAY THAT YOU HAVE NOT LOOKED AT ONE SINGLE INTERNAL TOBACCO INDUSTRY DOCUMENT IN

- RELATION
- 4 TO WHETHER OR NOT THEY ANALYZE CHILDREN AND THE NEEDS OF
- 5 CHILDREN IN MARKETING THEIR PRODUCTS OTHER THAN WHAT MAY
- 6 HAVE BEEN SHOWN TO YOU IN A COURTROOM BY AN ATTORNEY SUCH
- AS
 - 7 MYSELF?

8 A. IT IS CORRECT THAT I HAVE NOT SEEN ANY INTERNAL 9 DOCUMENTS FROM THE CIGARETTE COMPANIES OTHER THAN

DOCUMENTS

THEY

- 10 THAT APPEARED -- EITHER WERE SHOWN TO ME IN A DEPOSITION OR
- 11 COURTROOM OR WERE ATTACHED TO AN EXPERT'S REPORT.
- 12 Q. AND, SIR, IS IT FAIR TO SAY THAT YOU HAVE SPENT
- 13 NO TIME LOOKING THROUGH THE INTERNAL FILES OF THE PEOPLE
- YOU

 14 ARE HERE TESTIFYING ON BEHALF OF TO SEE WHETHER OR NOT
- 15 HAVE DOCUMENTS THAT ADDRESS THE ISSUE OF YOUTH AND MARKETING
- 16 TO YOUTH?
- 17 A. I DID NOT LOOK AT ANY INTERNAL COMPANY DOCUMENTS
- 18 FOR THREE SIGNIFICANT REASONS.
- 19 Q. YOU HAVE NOT LOOKED AT ANY COMPANY DOCUMENTS, 20 ALTHOUGH YOU HAVE BEEN TESTIFYING ON BEHALF OF CIGARETTE
- 21 COMPANIES SINCE THE LATE 1980S; IS THAT CORRECT?
- 22 A. WELL, FIRST OF ALL, I'VE ONLY TESTIFIED A FEW
- 23 TIMES. I'M NOT SURE THAT I TESTIFIED ON BEHALF OF THE
- 24 CIGARETTE COMPANIES. THAT MAY BE LEGALLY CORRECT.
- 25 BUT I'VE BEEN RETAINED BY LAW FIRMS TO ADDRESS
- 26 THE ISSUE OF SMOKING INITIATION AND SMOKING BEHAVIOR AND
- 27 REPORT ON WHAT MY CONCLUSIONS ARE CONCERNING THOSE.

"THREE SOLID GOOD REASONS," I WILL, BUT IT'S ALREADY IN

18

THE 19

RECORD ANYWAY.

20 MS. CHABER: THAT'S OKAY. I'D MOVE TO HAVE IT 21 STRICKEN AT THIS POINT IN TIME. 22 THE COURT: I'LL STRIKE IT THIS TIME. 23 MS. CHABER: Q. WOULD YOU AGREE, SIR, THAT 24 THERE ARE BOTH PSYCHOSOCIAL REASONS FOR SMOKING AND 25 PHARMACOLOGICAL REASONS FOR SMOKING? A. YOU HAVE GONE WAY BEYOND MY EXPERTISE, AND 26 27 THAT'S -- I DON'T EVEN KNOW WHAT SOME CASE -- I'M NOT QUITE 28 SURE WHAT THE DISCIPLINE IS YOU'RE TALKING ABOUT. 4508 1 THAT IS WAY BEYOND MY EXPERTISE. I'M SORRY. 2 Q. SIR, YOU KNOW THAT THERE ARE SOME PRODUCTS OUT THERE THAT PEOPLE USE BECAUSE THEY HAVE A NEED FOR THEM, LIKE THEY NEED TO WASH THEIR CLOTHES, AND OTHER PRODUCTS THAT PEOPLE MAY USE BECAUSE THEY HAVE A NEED FOR THEM BECAUSE OF A PHYSIOLOGICAL NEED? 7 A. AGAIN, ADDRESSING A PHYSIOLOGICAL NEED IS 8 REALLY -- YOU'VE REALLY GONE WAY BEYOND MY EXPERTISE. I'M Α 9 MARKETING GUY. THAT'S JUST BEYOND MY EXPERTISE. IT SOUNDS 10 LIKE IT'S THE MEDICAL PROFESSION TO ME. Q. SIR, HAVE YOU LOOKED AT ANY OF THE MARKETING 11 12 DOCUMENTS OF R.J. REYNOLDS OR PHILIP MORRIS OR ANY OTHER

TOBACCO COMPANY TO SEE WHETHER THEY LOOK AT ISSUES SUCH AS PHARMACOLOGICAL OR PHYSIOLOGICAL NEED IN TERMS OF MARKETING 15 THEIR PRODUCTS? 16 A. WE ARE GOING BACK OVER THE SAME TERRITORY AGAIN. AS I MENTIONED EARLIER -- I MEAN, GOSH, I HAVEN'T LOOKED ATANY OF THE INTERNAL DOCUMENTS OF ANY OF THE TOBACCO 18 19 COMPANIES, OTHER THAN THOSE THAT HAVE BEEN PRESENTED TO ME 20 AT DEPOSITION OR TRIAL, OR THOSE THAT ARE PART OF, YOU KNOW, 21 AN ATTACHMENT TO SOME EXPERT'S REPORT. 22 Q. AND, SIR, I GUESS THAT WOULD REMAIN TRUE ALSO FOR 23 DETERMINING WHETHER OR NOT THE TOBACCO COMPANIES -- THE 24 CIGARETTE MANUFACTURERS HAVE ATTEMPTED TO ENLARGE THEIR 25 SHARE OF THE UNDER-18 MARKET THROUGH ANY MEANS? 26 Α. THAT WOULD ALSO BE TRUE. Q. YOU HAVE NOT LOOKED AT ANY DOCUMENTS ON THAT 27 28 ISSUE. 4509 1 WOULD THAT ALSO BE TRUE AS TO DOCUMENTS

RELATING TO AN ATTEMPT TO ENLARGE A MINOR OR YOUTH MARKET SHARE OF Α PARTICULAR BRAND? 3 MR. ESCHER: OBJECTION, YOUR HONOR. VAGUE. AND ALSO, I BELIEVE IT'S CUMULATIVE, 6 ARGUMENTATIVE. 7 THE COURT: IT IS REPETITIVE. I'M GOING TO SUSTAIN AND ASK MS. CHABER TO MOVE ON TO SOMETHING ELSE, 8 PLEASE. 9 10 MS. CHABER: Q. DO YOU STILL HAVE THE 1994 11 SURGEON GENERAL'S REPORT UP THERE? A. NO, I DO NOT. 12 13 Q. I'LL GET YOU A COPY. 14 SIR, LET ME READ YOU A CONCLUSION FROM THE 1994 15 SURGEON GENERAL'S REPORT ON PREVENTING TOBACCO USE AMONG 16 YOUNG PEOPLE, AND ASK YOU WHETHER OR NOT YOU AGREE WITH THAT 17 STATEMENT. 18 MR. ESCHER: OBJECTION, YOUR HONOR. OBJECT TO 19 THE FORM OF THE QUESTION. THE COURT: THE REPORT IS NOT IN EVIDENCE, I 20 21 GUESS. 22 IS THAT THE BASIS OF THE OBJECTION? 23 MR. ESCHER: SHE IS NOT IMPEACHING ANY

TESTIMONY

24 AT THIS POINT, YOUR HONOR. 25 THE COURT: YES, I AGREE. I'LL SUSTAIN. 26 IF YOU WANT TO ASK HIM THE QUESTION, YOU CAN ASK 27 HIM THE QUESTION WITHOUT REFERENCE TO THE DOCUMENT. 28 MS. CHABER: Q. SIR, IT'S TRUE, IS IT NOT, 4510 1 THAT "CIGARETTE ADVERTISING APPEARS TO AFFECT YOUNG PEOPLE'S PERCEPTION OF THE PERVASIVENESS, IMAGE AND THE FUNCTION OF SMOKING, " IS IT NOT? 4 A. NO, THAT IS NOT ABSOLUTELY TRUE. 5 Q. AND, SIR, IT'S TRUE THAT "SINCE MISPERCEPTIONS IN 6 THESE AREAS CONSTITUTE PSYCHOSOCIAL RISK FACTORS FOR THE 7 INITIATION OF SMOKING, CIGARETTE ADVERTISING APPEARS TO INCREASE YOUNG PEOPLE'S RISK OF SMOKING"; TRUE OR NOT TRUE? 9 I DO NOT AGREE WITH THAT. 10 AND, SIR, THOSE ARE TWO CONCLUSIONS THAT THE 11 SURGEON GENERAL REACHED IN 1994, DID THEY NOT, IN THEIR 12 300-PAGE REPORT ON PREVENTING YOUTH TOBACCO USE AMONG YOUNG 13 PEOPLE? 14 A. COULD YOU DIRECT ME TO WHERE YOU'RE READING,

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15
     YOU ARE TALKING ABOUT, SO THAT I CAN READ IT AND THEN
16
     RESPOND AT LEAST TO WHAT YOUR QUESTION IS.
17
           Q. THE PAGE I OPENED TO, SIR, PAGE 195, CONCLUSION
18
    5.
19
           A. CONCLUSION 5?
                CONCLUSION 5, SIR.
20
21
                THE COURT: THIS IS PLAINTIFFS' 1944 FOR
22
     IDENTIFICATION, FOR THE RECORD?
23
                MS. CHABER: YES.
24
                AND I WOULD MOVE THIS INTO EVIDENCE, YOUR
HONOR.
25
                IT'S BEEN PREVIOUSLY ESTABLISHED BOTH THROUGH
26
      SEVERAL OTHER WITNESSES --
27
                THE COURT: YOU DON'T NEED TO ARGUE.
                LET'S JUST SEE IF THERE'S AN OBJECTION.
28
4511
 1
                MR. ESCHER: WE OBJECT, YOUR HONOR. HEARSAY.
                THE COURT: SUSTAINED.
MS. CHABER: Q. DID I READ THAT CORRECTLY,
 2
 3
     SIR, THAT "CIGARETTE ADVERTISING APPEARS TO AFFECT YOUNG
 5
     PEOPLE'S PERCEPTIONS OF THE PERVASIVENESS, IMAGE AND
 6 FUNCTION OF SMOKING" AS A CONCLUSION OF THE SURGEON
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7
     GENERAL'S REPORT?
           A. THAT'S PART OF THE CONCLUSION.
8
9
           Q. DID I READ THAT SENTENCE CORRECTLY?
10
           A. YOU READ THAT CORRECTLY. YOU READ THE FIRST
11
    SENTENCE CORRECTLY.
           O. THE SECOND SENTENCE: "SINCE MISPERCEPTIONS IN
13
     THESE AREAS CONSTITUTE PSYCHOSOCIAL RISK FACTORS FOR THE
14
     INITIATION OF SMOKING, CIGARETTE ADVERTISING APPEARS TO
     INCREASE YOUNG PEOPLE'S RISK OF SMOKING."
15
               DID I READ THAT CORRECTLY, SIR?
16
              YES, YOU DID. YOU READ IT CORRECTLY.
17
18
           Ο.
              DID THE SURGEON GENERAL ALSO CONCLUDE THAT
19
     CIGARETTE ADVERTISING USES IMAGES RATHER THAN INFORMATION
TO
20 PORTRAY THE ATTRACTIVENESS AND FUNCTION OF SMOKING?
21
                MR. ESCHER: OBJECTION, YOUR HONOR. HEARSAY.
22
                THE COURT: SUSTAINED.
23
                MS. CHABER: Q. DOCTOR, YOU DON'T BELIEVE
THAT
24
     CIGARETTE SMOKING -- STRIKE THAT.
25
               YOU DON'T BELIEVE THAT CIGARETTE ADVERTISING
26
     PROMOTES INITIATION OF SMOKING AMONGST YOUTH, DO YOU?
27
          A. NO, I DO NOT.
           Q. AND YOU DO NOT BELIEVE THAT CIGARETTE
ADVERTISING
```

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4512
 1
     INCREASES YOUNG PEOPLE'S RISK OF SMOKING?
 2
            A. INCREASES YOUNG PEOPLE'S RISK OF SMOKING?
            O. THE RISK THAT THEY WILL START SMOKING.
            A. I DON'T BELIEVE SO, NO.
 5
               AND, SIR, YOU DON'T BELIEVE THAT CIGARETTE
 6
     ADVERTISING IMAGES PORTRAY ATTRACTIVENESS IN THE FUNCTION
OF
7
     SMOKING AND CORRELATE WITH PSYCHOSOCIAL FACTORS THAT
APPEAL
8
   TO YOUNG PEOPLE, DO YOU?
9
                 MR. ESCHER: OBJECTION. VAGUE, YOUR HONOR.
                 THE COURT: DO YOU UNDERSTAND THE QUESTION?
10
11
                 THE WITNESS: NO, YOUR HONOR, I REALLY DO NOT.
12
                 THE COURT: SUSTAINED.
                 MS. CHABER: Q. SIR, DO YOU RECALL EARLIER
13
14
   THIS MORNING YOU TESTIFIED THAT YOU DIDN'T BELIEVE THAT
15
     CIGARETTE ADVERTISING CONVEYING INDEPENDENCE,
16
     ADVENTURE-SEEKING, YOUTHFUL ACTIVITIES THEMES, CORRELATED
17
     WITH PSYCHOSOCIAL FACTORS THAT APPEAL TO YOUNG PEOPLE;
18
     CORRECT?
   A. NO, I DIDN'T TESTIFY TO THAT. I DON'T RECALL EVER EVEN USING THE WORD "PSYCHOSOCIAL." I JUST DON'T
19
20
21 RECALL USING THOSE WORDS, NO.
```

Q. SIR, THERE ARE CERTAIN THEMES THAT I ASKED ABOUT, SUCH AS INDEPENDENCE AND ADVENTURE-SEEKING, AND Q. SIR, THERE ARE CERTAIN THEMES THAT I ASKED YOU ASKED 24 YOU WHETHER OR NOT CIGARETTE ADVERTISING APPEALED TO 25 CONNECTION WITH THOSE TYPES OF THEMES. DO YOU RECALL THAT QUESTION? 26 27 A. I DON'T RECALL YOUR QUESTION. 28 I DO RECALL WHAT I SAID, BUT I DON'T RECALL YOUR 4513 1 QUESTION SPECIFICALLY WHETHER -- I WOULDN'T WANT TO SAY, "GEE, THAT'S WHAT YOU SAID." NO. 3 Q. YOUR ANSWER WAS, SIR, THAT YOU DIDN'T THINK THAT 4 THERE WAS SUFFICIENT DATA TO SAY THAT YOUTH WERE ATTRACTED TO ADVERTISING CONVEYING INDEPENDENCE OR ADVENTURE-SEEKING? 6 MR. ESCHER: OBJECTION, YOUR HONOR. THE FORM OF 7 THE QUESTION. THE COURT: SUSTAINED.
MS. CHABER: Q. SIR, DO YOU AGREE THAT 8 9 10 ADVERTISING CONVEYS INDEPENDENCE, HEALTHFULNESS, 11 ADVENTURE-SEEKING AND YOUTHFUL ACTIVITY THEMES THAT APPEAL

12 13 SOME	TO YOUNG PEOPLE? A. I HAVE, AS I MENTIONED EARLIER THIS MORNING,
14 15	REAL CONCERN ABOUT THAT, SIMPLY BECAUSE THERE IS DATA THAT COMES FROM THE UNIVERSITY OF MICHIGAN'S "MONITORING THE FUTURE" STUDY THAT WOULD INDICATE THAT THOSE AND ONE
17 18 19 FORTH	FACTORS THAT PEOPLE ASSOCIATE WITH SMOKING BEHAVIOR, THAT SMOKERS ARE NOT INDEPENDENT, ADVENTURE-SEEKING AND SO
20 THAT	AND THERE IS CLEARLY A LARGE NATIONAL STUDY
21 22 THE	WOULD ARGUE AGAINST THE POINT THAT YOU'RE MAKING. Q. SIR, YOU DISAGREE WITH THE SURGEON GENERAL OF
23 TOBAC	
24 25	USE AMONG YOUNG PEOPLE IN HIS CONCLUSION? AND ACTUALLY, I SHOULD SAY "IN HER CONCLUSION,"
26 27 28	SINCE I BELIEVE THIS WAS JOCELYN ELDER'S REPORT MR. ESCHER: YOUR HONOR. EXCUSE ME. MS. CHABER: Q ON THE PSYCHOLOGY

```
4514
1
                THE COURT: JUST A SECOND. HOLD ON.
2
                THERE'S AN OBJECTION.
3
                MS. CHABER: I HADN'T FINISHED MY QUESTION, SO
I
    WASN'T SURE.
5
              THE COURT: I KNOW, BUT HE WAS TRYING TO
PREVENT
6 YOUR QUESTION.
               MS. CHABER: OKAY.
7
8
               MR. ESCHER: I'M OBJECTING TO THE FORM OF THE
   QUESTION, YOUR HONOR.
9
10
               THE COURT: I DO NOT REMEMBER WHETHER DR.
MARTIN
11 SAID THAT HE CONSIDERED THAT REPORT IN RENDERING HIS
12
    OPINIONS IN THIS CASE.
13
               HAS HE BEEN ASKED THAT QUESTION?
14
                MS. CHABER: HE TESTIFIED --
15
                THE COURT: LET ME JUST ASK YOU: DID YOU
16
    CONSIDER THAT 1994 SURGEON GENERAL'S REPORT IN CONNECTION
17
     WITH YOUR OPINIONS -- GIVING YOUR OPINIONS IN THIS CASE?
18
               THE WITNESS: NO, YOUR HONOR.
               MS. CHABER: THAT IS CONTRARY TO HIS TESTIMONY
19
20
    ON FRIDAY. HE READ IT, YOUR HONOR. HE HAS EXAMINED IT.
HE
21
    HAS READ IT. HE DOESN'T CONSIDER ACCEPTING IT IN HIS
```

OPINIONS. AND THAT WAS THE TESTIMONY WE HAD ON FRIDAY. 23 THE COURT: LET ME REPHRASE THE QUESTION AND BE24 SURE. 25 THE QUESTION THAT I'M ASKING YOU ISN'T WHETHER 26 YOU AGREE WITH IT OR WHETHER YOU'RE BASING ANY OPINIONS ON 27 28 THE QUESTION IS: DID YOU CONSIDER IT IN 4515 1 CONNECTION WITH RENDERING YOUR OPINIONS IN THIS CASE? THE WITNESS: IN CONJUNCTION WITH RENDERING MY 3 OPINIONS IN THIS CASE, NO. 4 I HAVE READ THE DOCUMENT, AND THAT'S WHAT MY 5 RESPONSE WAS. I DID NOT CONSIDER IT IN RENDERING MY 6 OPINIONS IN THIS SPECIFIC CASE. NO, YOUR HONOR. 7 THE COURT: DID YOU CONSIDER IT IN RENDERING 8 OPINIONS THAT YOU'VE GIVEN IN ANY OTHER CASE OR THAT IS THE 9 SAME AS THE OPINION THAT YOU ARE GIVING IN THIS CASE? 10 THE WITNESS: NO, YOUR HONOR. 11 MS. CHABER: Q. YOU HAVE NEVER, SIR, EXAMINED 12 THE 1994 300-PAGE REPORT BY THE SURGEON GENERAL OF THE

13 UNITED STATES ON PREVENTING TOBACCO USE AMONG YOUNG PEOPLE 14 IN FORMING YOUR OPINIONS, SIR, WITH RESPECT TO WHETHER OR NOT ADVERTISING AFFECTS YOUNG PEOPLE SMOKING? 16 A. I DID NOT. 17 I HAVE READ THE SURGEON GENERAL'S REPORT, 18 OBVIOUSLY. AND I HAVE ENDEAVORED TO LOOK AT THE UNDERLYING 19 DOCUMENTS THAT ARE CITED IN THE SURGEON GENERAL'S REPORT. 20 BUT DID I RELY UPON THE SURGEON GENERAL'S REPORT 21 AS IT IS PRESENTED? THE ANSWER IS NO. Q. I'M NOT ASKING YOU IF YOU RELIED ON IT. 23 I'M ASKING YOU IF YOU READ IT AND REJECTED IT, 24 SIR? 25 A. NO, I DIDN'T REJECT IT. 26 Q. YOU JUST READ IT AND IT DIDN'T FORM ANY OPINION, 27 PRO OR CON -- YOU JUST READ IT, AND IT HAS NO BASIS IN YOUR 28 OPINIONS THAT YOU'VE COME TO RENDER HERE AS AN EXPERT ON 4516 1 ADVERTISING AND YOUTH; IS THAT CORRECT? A. I THINK YOU'RE MISINTERPRETING WHAT I DID. 3 I'LL TRY AND MAKE IT AS CLEAR AS POSSIBLE. I 4 READ IT. NO, I DID NOT REJECT IT. AND I DID NOT AGREE

WITH 5 IT. 6 I MEAN, I DID NEITHER OF THOSE ACTIONS. I READ 7 IT, BECAUSE IT PROVIDES -- AS YOU ALREADY HAVE CHARACTERIZED IT, IT IS A LITERATURE SEARCH. 9 AND SO I USED IT AS A DEVICE FOR LOOKING AT THE 10 VARIOUS UNDERLYING -- TO UNDERSTAND WHAT WERE THE UNDERLYING 11 DOCUMENTS ASSOCIATED WITH IT. 12 AND THEN I LOOKED AT THOSE UNDERLYING DOCUMENTS, 13 MANY OF WHICH, I GUESS, IN THE DOCUMENT WE PROVIDED TO YOU 14 ARE THE LIST OF DOCUMENTS THAT I DID RELY UPON. 15 BUT SPECIFICALLY, NO, I DID NOT USE THE SURGEON 16 GENERAL'S REPORT. ONLY TO LOOK AT WHAT WERE THE DOCUMENTS 17 IN THE LITERATURE. 18 MS. CHABER: Q. SIR, YOU READ IT, YOU 19 CONSIDERED IT. 20 DID YOU ELIMINATE IT AS BEING AUTHORITATIVE? 21 A. I DID NEITHER. I JUST READ IT, AND THEN USED THE 22 UNDERLYING DOCUMENTS THAT ARE IN IT. IT'S A LITERATURE 23 SEARCH, AND SO I WANTED TO LOOK AT THE DOCUMENTS THAT ARE 24 PART OF THE LITERATURE. 25 Q. AND YOU ARE THE ONE THAT CALLED IT A LITERATURE

27 I ASKED YOU, I BELIEVE ON FRIDAY, IF YOU WERE 28 AWARE OF THE PEER REVIEW PROCESS THAT THE SURGEON GENERAL'S

4517

- 1 REPORT GOES THROUGH BEFORE IT IS PRODUCED AND PUT OUT THERE
- AS AN AUTHORITATIVE DOCUMENT, AND YOU WERE UNAWARE.
- DO YOU RECALL THAT TESTIMONY ON FRIDAY? 4
 - A. SURE. I RECALL IT QUITE WELL.
- Q. SIR, YOU REFERRED TO THE SURGEON GENERAL'S 5 REPORT, DID YOU NOT? 6
- 7 A. REFERRED TO IT?
- 8 Q. YOU REFERRED TO IT. YOU PICKED IT UP, YOU READ IT, YOU REFERRED TO IT, YOU TOOK SOME THINGS OUT OF IT; 9 10 REFERRED TO IT?
- 11 A. I'M REALLY HAVING A HARD TIME FOLLOWING YOU. I LOOKED AT IT. I READ IT. AND WHEN YOU SAY "PICKED A FEW 12 THINGS OUT OF IT, " NO. 13
- 14 I THINK, GEE, I REALLY WENT IN AND TOOK A LOT

OF

15 THE UNDERLYING DOCUMENTS OUT OF HERE AND READ THE UNDERLYING

16 17	DOCUMENTS."
18	I CAN GIVE YOU AN EXAMPLE, IF YOU WANT, OF AN UNDERLYING DOCUMENT I READ, WHICH IS THAT THICK
19	(INDICATING).
20	Q. SIR, I'M TRYING FIND OUT WHAT YOU DID WITH
21	RESPECT TO THE SURGEON GENERAL'S REPORT.
22	YOU READ IT. SOMEHOW, THE INFORMATION IN IT
DID	
23	NOT AFFECT YOUR OPINION, EITHER PRO OR CON.
24	YOU WERE TOTALLY NEUTRAL ABOUT THE INFORMATION
25	THAT YOU READ IN THE SURGEON GENERAL'S REPORT?
26	MR. ESCHER: OBJECTION, YOUR HONOR. THIS IS
27	CUMULATIVE AND UNNECESSARY, I BELIEVE.
28	THE COURT: I'M GOING TO ALLOW IT.
4518	
1	YOU MADE THE OBJECTION ABOUT GOING INTO THE
2	DOCUMENTS UNDERLYING. SHE'S TRYING TO SEE IF SHE CAN LAY
A	DOCUMENTS UNDERLITING. SHE STRITING TO SEE IT SHE CAN DAT
3	FOUNDATION FOR THESE KINDS OF OUESTIONS OR NOT.
4	IT WAS YOUR OBJECTION THAT TRIGGERED THIS LINE
OF	II WIS TOOK ODODGITON THAT INTOGERED THE BINE
5	EXAMINATION. I'M GOING TO LET HER PURSUE IT. AT LEAST,
I'M	,
6	GOING TO LET HER ASK THIS QUESTION.
7	THE WITNESS: I HAVE TO HAVE THE QUESTION READ
	~

8 BACK TO ME. I'M SORRY. 9 (RECORD READ) 10 THE WITNESS: I THINK THE WORD "NEUTRAL" 11 MISCHARACTERIZES WHAT I HAVE BEEN TRYING TO SAY. 12 I READ THE REPORT. IT CERTAINLY IS A 13 VALUABLE DOCUMENT. I'M NOT ARGUING THAT IT'S A VERY 14 VALUABLE DOCUMENT, BECAUSE WHAT IT DID WAS PROVIDED ME WITH 15 UNDERLYING -- THE DOCUMENTS THAT UNDERLIE THIS REPORT, WHICH 16 I SPECIFICALLY LOOKED AT. 17 AND IN SOME CASES, THEY WERE MUCH, MUCH MORE 18 HELPFUL IN ME FORMULATING AN OPINION AS OPPOSED TO THIS 19 DOCUMENT ITSELF (INDICATING). 20 SO I TOOK THIS DOCUMENT. IS IT IN RELIANCE? IT 21 MEANS I RELIED ON IT TO GET THE UNDERLYING DOCUMENTS THAT 22 ARE CITED IN HERE AND TO REVIEW THEM. MS. CHABER: Q. AND, SIR, IN DOING SO, IS IT 23 24 FAIR TO SAY THAT YOU REJECTED THE CONCLUSION STATED BY THE 25 SURGEON GENERAL OF THE UNITED STATES IN THEIR 1994 REPORT PREVENTING TOBACCO USE AMONG YOUNG PEOPLE THAT CIGARETTE 27 ADVERTISING CONVEYS INDEPENDENCE, HEALTHFULNESS, 28 ADVENTURE-SEEKING AND YOUTHFUL ACTIVITY THEMES THAT APPEAL

4519 1 TO YOUNG PEOPLE? IS IT FAIR TO SAY THAT, SIR? 2 MR. HARDY: YOUR HONOR, OBJECTION TO THAT. THAT IS ASKED AND ANSWERED, THAT VERY QUESTION. MS. CHABER: I DON'T THINK SO. THE COURT: I'LL ALLOW IT. 5 6 IF THERE'S AN ARGUMENT ABOUT WHETHER HE DID IT 7 BEFORE, IT'S QUICKER TO DO IT AGAIN THAN IT IS TO WORRY 8 ABOUT IT. 9 GO AHEAD AND ANSWER IT. 10 THE WITNESS: AS I LOOKED THROUGH THE UNDERLYING 11 DOCUMENTS THAT ARE CONTAINED IN HERE --12 MS. CHABER: YOUR HONOR, I WOULD MOVE TO 13 STRIKE. THAT'S NOT MY QUESTION. 14 THE COURT: I DON'T KNOW WHETHER IT IS OR NOT 15 BECAUSE --16 MS. CHABER: MY QUESTION WAS WHETHER HE AGREED 17 WITH THE STATEMENT -- THE CONCLUSION REACHED BY THE SURGEON 18 GENERAL, AS STATED? 19 THE COURT: I DON'T KNOW UNTIL I HEAR MORE WORDS 20 OUT OF HIS MOUTH WHETHER IT'S RESPONSIVE OR NOT.

21 22 23 24 25	YOU ARE GOING TO HAVE TO EITHER WITHDRAW THE QUESTION OR HEAR HIS ANSWER. THEN, IF YOU WANT TO MOVE TO STRIKE, YOU CAN. I CAN'T TELL RIGHT NOW. MS. CHABER: CAN I HAVE THE QUESTION READ BACK
26	ONE MORE TIME, JUDITH, PLEASE.
27	(RECORD READ)
28 4520	THE WITNESS: WELL FIRST OF ALL, IT'S YOUR
1	PARAPHRASING OF WHAT IS CONCLUSION NO. 3 ON PAGE 195.
2	YOU ASKED ME WHETHER OR NOT I AGREED WITH THE
3 4 5	CONCLUSION, AND YOU STATED THE CONCLUSION. YOU READ ME A CONCLUSION. YOU ASKED ME WHETHER I AGREED WITH IT. AND I SAID TO YOU, "NO, I DO NOT AGREE WITH
IT."	, ,
6	MS. CHABER: Q. AND, SIR, WOULD YOU AGREE
THAT	
7	YOUNG PEOPLE CONTINUE TO BE A STRATEGICALLY IMPORTANT
MARKE	
8 9 10 11	A. DO I AGREE WITH THAT?
11	A. NO, I DO NOI.

12 13	Q. AND SIR, IS IT FAIR TO SAY THAT YOU HAVE NEVER BEEN CONSULTED BY THE FEDERAL TRADE COMMISSION OR ANY
OTHER	
14	REGULATORY BODY FOR A CITY, COUNTY, STATE OR COUNTRY TO
15	EVALUATE ADVERTISING AND ITS EFFECT ON YOUTH?
16	A. GOSH. I'M SORRY IF I'M NOT RESPONSIVE TO THE
WAY	
17	YOU ASKED THE QUESTION BECAUSE BUT WHAT TROUBLES ME IS
18	THAT I DID I DID EVALUATE ADVERTISING TOWARD YOUTH IN
19	CONJUNCTION WITH A CASE BEFORE THE FEDERAL TRADE
20	COMMISSION.
21	IT WAS NOT FOR THE FEDERAL TRADE COMMISSION,
22	ALTHOUGH IT WAS REPORTED TO THEM. THAT WAS IN THE CASE OF
23	BEVERAGES, AND IN PARTICULAR, SOFT DRINKS.
24	Q. SIR, IS IT FAIR TO SAY THAT YOU HAVE NEVER BEEN
25	CONSULTED BY THE FEDERAL TRADE COMMISSION OR ANY OTHER
26	REGULATORY BODY FOR A CITY, COUNTY, STATE OR COUNTRY TO
27	EVALUATE CIGARETTE ADVERTISING AS IT RELATES TO YOUTH?
28	A. WELL, THAT WOULD BE I WAS NEVER RETAINED BY
4521	
1	THEM, ALTHOUGH I WAS ASKED A LOT BY THE FEDERAL TRADE
2	COMMISSION ON THAT SUBJECT IN A CASE.
3	BUT NO, I HAVEN'T BEEN RETAINED BY ANY
4	GOVERNMENTAL BODY RELATIVE
5	O. T SAID "CONSULTED."

6 7	A. I WASN'T CONSULTED BY ANY GOVERNMENTAL BODY. Q. SIR, IS IT FAIR TO SAY THAT YOU HAVE NEVER BEEN
8	ASKED TO CONTRIBUTE TO ANY SURGEON GENERAL'S REPORT AS IT
9	RELATES TO CIGARETTE SMOKING OR ADVERTISING?
10	A. OH, THAT'S TRUE.
11	MS. CHABER: I HAVE NOTHING FURTHER, YOUR
HONOR	
12	
	FURTHER FOR DR. MARTIN?
14	
HONOR	
15	THE COURT: MS. CHABER, IS THAT THE COURT'S
COPY	OR WOUR GORW OF MUE REPORMS
10 17	OR YOUR COPY OF THE REPORT?
ITS	MS. CHABER: I BELIEVE IT'S THE COURT HAS
	OWN COPY, SO IT'S MINE.
19	THE COURT: THAT MAY BE YOURS.
20	MS. CHABER: YES.
20	MO. CHADEK. IED.
21	
22	REDIRECT EXAMINATION
23	BY MR. ESCHER: Q. GOOD MORNING, DOCTOR.
24	A. GOOD MORNING.
25	Q. HI.

26 27	YOU WERE ASKED A FEW QUESTIONS DURING CROSS-EXAMINATION ABOUT YOUR COMPENSATION IN CONNECTION
WITH 28	THIS CASE AND OTHERS RELATING TO CIGARETTE ADVERTISING.
4522	
1	DO YOU REMEMBER THAT?
2	A. YES, I DO.
3	O. AND HAVE YOU EVER, IN ANY YEAR, RECEIVED AS
MUCH	2. 12.2 12.1 100 2.2.1, 12.1 12.1 12.11, 12.22.1.2
4	AS 10 PERCENT OF YOUR TOTAL INCOME FROM YOUR EXPERT
WITNE	SS
5	WORK IN CONNECTION WITH CIGARETTE ADVERTISING?
6	A. OH, NO, NOT EVEN CLOSE.
7	O. AND DO YOU THINK THAT THE TOTAL AMOUNT OF YOUR
8	COMPENSATION RELATING TO EXPERT WITNESS WORK WITH RESPECT
TO	
9	CIGARETTE ADVERTISING OVER THE YEARS THAT YOU'VE BEEN
10	RETAINED TO DO THAT IS LESS THAN 5 PERCENT OF YOUR TOTAL
11	INCOME?
12	A. GEE, I GUESS I COME IN AROUND 2, 3 PERCENT
MAYBE	•
13	Q. NOW, WE TALKED A LITTLE BIT ABOUT THE ISSUE OF
14	PROMOTIONAL ACTIVITIES RELATING TO CIGARETTE ADVERTISING
AND	
15	PROMOTIONS THAT ARE REPORTED TO THE FEDERAL TRADE

16 COMMISSION. 17 DO YOU REMEMBER THAT? 18 A. YES. 19 Q. AND DO YOU REMEMBER DRAWING A DISTINCTION BETWEEN 20 ADVERTISING MONEY AND PROMOTIONAL MONEY? A. YES, I DO. 22 Q. AND YOU CONSIDERED THAT SOME OF THE PROMOTIONAL ACTIVITIES WERE, IN FACT, MORE REASONABLY VIEWED AS BEING 23 24 PART OF PRICING; IS THAT RIGHT? 25 A. THAT'S CORRECT. 26 Q. AND DO YOU HAVE A SENSE FOR -- OF THE TOTAL 27 AMOUNT OF DOLLARS IN CIGARETTE ADVERTISING AND PROMOTION AS 28 REPORTED TO THE FEDERAL TRADE COMMISSION, APPROXIMATELY WHAT 4523 1 PERCENT OF THE TOTAL SPENDING RELATES TO THINGS THAT ARE 2 PURELY PRICE? 3 A. WELL, I WON'T USE THE WORD "PURELY PRICE" BUT 4 MOSTLY PRICE. 5 I DON'T WANT TO LEAVE A WRONG IMPRESSION, BUT 6 IT'S MOSTLY PRICE-ORIENTED, AND IT'S OVER 50 PERCENT OF THE 7 TOTAL AMOUNT.

O. AND THE AMOUNT THAT RELATED TO ENTERTAINMENT

9 ACTIVITIES, LIKE CONCERTS AND THE LIKE, DID YOU HAVE --10 A. LIKE SOUTH OF MARKET STREET? THE COURT: ONE AT A TIME. 11 12 THE WITNESS: I'M SORRY. LIKE SOUTH OF MARKET 13 STREET? MR. ESCHER: Q. LIKE THAT, AS AN EXAMPLE. 14 YES. THE PUBLIC ENTERTAINMENT, YES. IT'S 2.1 15 PERCENT, WHICH MEANS ABOUT 2.1 CENTS ON EVERY -- FOR EVERY 16 17 DOLLAR SPENT TOTALLY. 18 Q. DOCTOR, YOU WERE ASKED SOME QUESTIONS ABOUT THE 19 CONCLUSIONS OF THE SURGEON GENERAL'S REPORT IN 1994. 20 DO YOU REMEMBER THAT? A. THAT SEEMED TO BE WHAT I WAS BEING ASKED HERE, 21 22 YES. 23 O. OKAY. YOU OFFERED THREE GOOD REASONS THAT YOU 24 DECIDED NOT TO LOOK AT INTERNAL COMPANY DOCUMENTS. 25 WHAT WERE THOSE REASONS? 26 WELL, THE FIRST IS KIND OF LIKE WHAT I MENTIONED

HERE BEFORE. WHEN I READ THE NEWS REPORTS, THERE ARE

THOUSANDS OR MILLIONS OF DOCUMENTS.

4524

27

8

1 SO PHYSICALLY, I JUST -- YOU COULDN'T LOOK AT ALL 2 OF THOSE DOCUMENTS. AND JUST LOOKING AT THE TITLE OF THEM 3 WOULD NOT BE ENOUGH. YOU'D LITERALLY HAVE TO LOOK AT EVERY SINGLE DOCUMENT AND REVIEW IT. SO THERE'S JUST A PHYSICAL PROBLEM 6 THAT'S ASSOCIATED WITH THAT. 7 AND THE SECOND PROBLEM THAT YOU REALLY HAVE IN 8 LOOKING AT ANY KIND OF DOCUMENTS OR LETTERS OR THINGS OF 9 THAT SORT, IS THAT YOU HAVE TO UNDERSTAND THE CONTEXT IN 10 WHICH THOSE DOCUMENTS WERE WRITTEN, TO WHOM THEY WERE PRESENTED, AND WHO WERE THE PEOPLE WHO WROTE THEM. AND IN 11 12 SOME CASES, YOU KNOW, MAYBE THEY WEREN'T EVEN DELIVERED TO 13 SOMEBODY. 14 AND THE THEN THIRD, PERHAPS THE MOST IMPORTANT 15 REASON FOR NOT LOOKING AT INTERNAL COMPANY DOCUMENTS IS 16 BECAUSE THEY WERE NOT WHAT I WAS LOOKING FOR OR WHAT I 17 VIEWED AS WHAT I WAS DOING IN THIS CASE. 18 THEY WERE NOT SOMETHING THAT I WAS GOING TO LOOK 19 AT, BECAUSE I WAS LOOKING AT SMOKING INITIATION, SMOKING 20 BEHAVIOR, NOT -- I WASN'T SUPPOSED TO GO AND REVIEW COMPANY 21 DOCUMENTS AND SEE WHAT THEY WERE LIKE AND CHARACTERIZE 22 THEM. THAT WAS NOT MY JOB IN THIS CASE.

23 Q. SO IS IT FAIR TO SAY, FROM YOUR PERSPECTIVE, THAT 24 WHATEVER IS IN THE COMPANY FILES IS IRRELEVANT TO YOUR 25 OPINIONS IN THIS CASE? 26 A. AS FAR AS THE OPINIONS I HAVE IN THIS CASE, THEY 27 WERE IRRELEVANT. 28 Q. NOW, YOU SAID THAT YOU'D LOOKED AT SOME OF THE 4525 1 UNDERLYING ARTICLES AND MATERIALS THAT ARE CITED IN THE 1994 2 SURGEON GENERAL'S REPORT? 3 A. YES. 4 Q. AND YOU WENT AND LOOKED AT THE PRIMARY SOURCES 5 YOURSELF? 6 A. YES, I DID. 7 Q. DID YOU SEE ANY EXAMPLES WHERE THE PRIMARY SOURCE 8 DID NOT IN FACT SUPPORT THE SURGEON GENERAL'S CONCLUSIONS? 9 A. IN FACT, ONE OF THE THINGS THAT BOTHERED ME --AND SO WE GET THE PAGE COUNT, THE SURGEON GENERAL'S REPORT 10 11 IS -- I THINK I WAS TOLD IT WAS 300 OR SOME PAGES LONG. 12 THERE'S A STATEMENT IN THE SURGEON GENERAL'S

REPORT THAT ADVERTISING CAN AFFECT PRIMARY DEMAND FOR 13 14 PRODUCTS. 15 Q. IS THAT CONCLUSION GENERALLY INCONSISTENT WITH YOUR UNDERSTANDING OF THE PRINCIPLES THAT APPLY IN YOUR Q. IS THAT CONCLUSION GENERALLY INCONSISTENT WITH AREA OF MARKETING? A. THAT'S INCONSISTENT. 18 19 WHAT REALLY BOTHERED ME ABOUT IT WAS THE SOURCE 20 THAT WAS BEING CITED. THIS IS -- THE SOURCE IS A 1982 21 TEXTBOOK BY MICHAEL RAY, R-A-Y, WHO IS FROM STANFORD. 22 AND I WAS ALMOST SHOCKED WHEN I SAW THAT THERE'S 23 NO PAGE CITATION IN THE SURGEON GENERAL'S REPORT, SO IT MAKES IT REALLY DIFFICULT. 25 AND THE REASON I WAS SURPRISED IS, I USED THAT 26 TEXTBOOK IN TEACHING ADVERTISING MANAGEMENT, AND I KNOW 27 MICHAEL RAY. I MEAN, AND I HAVE KNOWN MICHAEL RAY A LONG TIME. IN FACT, HE'S EVEN BEEN A MEMBER -- OR WAS A MEMBER 4526 1 OF THE EDITORIAL REVIEW BOARD ON THE JOURNAL. SO I HAVE GONE AND LOOKED FOR THE BOOK. AND I 3 CANNOT FIND ANYTHING IN THAT TEXTBOOK THAT EVEN COMES CLOSE 4 TO SUGGESTING THAT PROPOSITION. AND I'M CONCERNED THAT SOMEBODY EITHER 5

MISQUOTED, MISUNDERSTOOD OR MAYBE THEY JUST MADE A CLERICAL ERROR. I 7 DON'T KNOW. BUT THERE'S AN EXAMPLE OF WHY ONE WANTS TO LOOK 8 AT THE UNDERLYING DOCUMENTATION. 9 Q. AND ARE YOU AWARE, DOCTOR, THAT DR. RICHARD 10 POLLAY WAS ONE OF THE AUTHORS OF THE CHAPTER IN THE 1994 SURGEON GENERAL'S REPORT THAT DEALT WITH THE ISSUE OF 11 12 CIGARETTE ADVERTISING? 13 A. OH, YES. 14 Q. THAT'S THE CHAPTER IN WHICH THIS CITATION 15 APPEARED THAT YOU JUST CITED? 16 A. I THINK IT MIGHT BE THAT CHAPTER. I DON'T HAVE 17 THE REPORT, BUT I THINK IT MAY BE. MR. ESCHER: I DON'T HAVE ANY FURTHER OUESTIONS. 19 THANK YOU VERY MUCH, DOCTOR. 20 THE COURT: DOES ANYBODY HAVE ANYTHING FURTHER? 21 22 RECROSS-EXAMINATION 23 BY MS. CHABER: Q. SIR, ISN'T IT TRUE THAT TO 24 EXAMINE AND WRITE SOME ARTICLES CRITICIZING SOME OF THE

25 PEOPLE WHO HAVE WRITTEN THE PRIMARY RESEARCH, R.J. REYNOLDS GAVE YOU \$90,000 TO PERFORM THAT STUDY? 27 A. NO. THEY DIDN'T GIVE ME \$90,000 TO DO WHAT YOU 28 JUST SAID, NO. 4527 1 Q. THEY DID GIVE YOU \$90,000, SIR, TO FUND A STUDY, 2 DID THEY NOT? A. WELL, THEY GAVE ME \$90,000 IN RESPONSE TO A REQUEST ON MY PART. 5 Q. OH, YOU --6 A. THEY DIDN'T COME AND JUST SAY, "HERE'S \$90,000." 7 Q. YOU SOLICITED THEM, SIR, FOR FUNDING SO THAT YOU COULD WRITE SOMETHING CRITICAL OF SOME OF THE PEOPLE WHO 8 DID 9 THE UNDERLYING RESEARCH; CORRECT? 10 A. NO. THAT WASN'T MY MOTIVE. YOU TOTALLY MISCHARACTERIZE. I'M SORRY, YOU KNOW. GOSH, I WENT AND 11 GOT

RESEARCH FUNDING, TRUE, FROM R.J. REYNOLDS, NOT WHILE I

INVOLVED IN ANY LITIGATION FOR THE COMPANY.

12

WAS 13

AND I SENT THEM A RESEARCH PROPOSAL TO EXAMINE
THE RESEARCH THAT HAD BEEN DONE SPECIFICALLY AND REPORTED
SPECIFICALLY IN THE JOURNAL OF THE AMERICAN MEDICAL
ASSOCIATION.
MY OBJECTIVE WAS NOT TO COME OUT AND BE
CRITICAL. MY OBJECTIVE WAS TO GO OUT AND LOOK AT THIS AND
MAKE A FAIR EVALUATION OF THAT RESEARCH.
Q. SIR, WASN'T YOUR PROPOSAL TO SOLICIT A CRITIQUE
ON THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION'S
ARTICLES ON ADVERTISING AND ITS EFFECT ON YOUTH?
A. YEAH. BUT THE WORD "CRITIQUE" IN MY LANGUAGE
TO LOOK AT THE RESULTS.
WHAT I PROPOSED TO DO IS THAT I WOULD,
INDEPENDENTLY, WITH ABSOLUTELY NO STRINGS ATTACHED FROM
REYNOLDS, I WOULD LOOK AT THE DOCUMENTS AND REPORT THE
RESULTS.
AND THEY WOULD HAVE ABSOLUTELY NO CONTROL OVER
WHAT WAS DONE IN THAT RESEARCH, NOR WHAT THAT RESEARCH

5 Q. SIR, YOU DIDN'T GO TO THE AMERICAN CANCER SOCIETY 6 WITH THAT PROPOSAL, DID YOU? A. NO, I DIDN'T. IT WAS -- IN FACT, THE PROPOSAL 8 JUST HAPPENED TO COME ABOUT IN A CHANCE MEETING WITH A 9 I SAID, "WOULD YOU FUND SOME RESEARCH?" AND HE 10 11 SAID "YES." AND I SENT THEM A PROPOSAL. 12 Q. AND R.J. REYNOLDS GAVE YOU \$90,000 TO WRITE THIS 13 RESEARCH; CORRECT? 14 A. NO, THEY DID NOT. THAT'S NOT A FAIR 15 CHARACTERIZATION. 16 THEY GAVE ME \$90,000 TO PAY THE EXPENSES AND TO 17 DO THE RESEARCH, NOT TO JUST TO WRITE THE RESEARCH. 18 Q. SIR, THERE ARE THOUSANDS OR MILLIONS OF 19 DOCUMENTS, I THINK YOU SAID, AND THERE'S SOME PHYSICAL PROBLEM OF LOOKING AT THESE DOCUMENTS. 20 21 IS THAT WHAT YOU SAID TO MR. ESCHER JUST NOW? 22 DID I UNDERSTAND THAT CORRECTLY? 23 A. WELL, AS I HEARD THE REPORT ON HOW MANY DOCUMENTS 24 THERE WERE, IT OCCURRED TO ME IT PROBABLY WOULD BE KIND OF 25 DIFFICULT. SIR, YOU ARE APPARENTLY COMPUTER-LITERATE. 26 Q. 27 YOU DO THESE NICE POWER POINT PRESENTATIONS.

28	THOSE ARE DONE ON A COMPUTER, ARE THEY NOT?
4529	
1	A. WELL, YEAH. I DO MAKE SOME POWER POINT
2	PRESENTATIONS.
3	I DON'T KNOW WHETHER YOU'D CALL ME
4	COMPUTER-LITERATE.
5	Q. YOU KNOW HOW TO SEARCH THE INTERNET, DON'T YOU,
6	SIR?
7	A. YES.
8	Q. YOU KNOW HOW TO GO ON TO THE DOCUMENT SITES
THAT	
9	EACH OF THE TOBACCO COMPANIES HAVE, THAT THEY HAVE THEIR
10	DOCUMENTS ON, AND THAT ALLOW YOU TO SEARCH THOSE DOCUMENTS
11	BY NOT ONLY TITLE BUT BY CONTENT?
12	A. I SUPPOSE. I'VE NEVER DONE THAT.
13	Q. YOU'VE NEVER TRIED TO LOOK AND TYPE IN THE
WORDS	
14	"ADVERTISING, CHILDREN, YOUTH, ADVERTISING," ANYTHING LIKE
15	
16	DOCUMENT SITE?
17	A. WELL, I WOULD BE VERY HESITANT TO DO THAT, AND
I	
18	WILL TELL YOU WHY.
19	THAT MEANS THAT I WOULD THEN HAVE BEEN RELYING
20	UPON SOMEBODY ELSE'S CODING SYSTEM.

21	SO WHEN I SAID THAT IF I WANTED TO LOOK AT
22	DOCUMENTS, IF I WERE GOING TO LOOK AT DOCUMENTS, I WOULD
23	WANT TO LOOK AT ALL OF THE DOCUMENTS AND READ THEM.
24	I FOUND IN A LOT OF INSTANCES THAT THOSE CODING
25	SYSTEMS, YOU KNOW, YOU PUT THE WORD IN "SEARCH FOR," DON'T
26	ALWAYS WORK SO WELL.
27	I KNOW WE ALL THINK THAT THE COMPUTER SYSTEMS
28	WORK PERFECTLY, BUT THEY DON'T. AND SO I WOULD BE VERY,
4530	
1	VERY HESITANT TO RELY ON THAT.
2	REMEMBER, THERE WERE TWO OTHER REASONS WHY I
3	DIDN'T LOOK AT THOSE DOCUMENTS.
4	Q. WE ARE ON THE FIRST ONE.
5	A. RIGHT.
6	Q. WE ARE ON THIS FIRST REASON.
7	SO THERE MIGHT BE DOCUMENTS THAT ARE MISCODED;
IS	
8	THAT A FAIR REITERATION OF WHAT YOU JUST SAID?
9	A. WELL, THEY MAY BE MISCODED OR NOT CODED AT ALL.
10	Q. BUT YOU DIDN'T LOOK TO SEE IF THERE WERE ANY
11	DOCUMENTS AT ALL THERE, DID YOU?
12	A. THAT'S MISCHARACTERIZES. I THINK THAT'S WRONG
TO	

13 SAY. 14 I DID NOT GO IN ON THE INTERET AND SEARCH FOR 15 COMPANY DOCUMENTS. I AGREE. 16 Q. AND YOU DIDN'T ASK R.J. REYNOLDS WHAT DOCUMENTS 17 THEY HAD IN THEIR POSSESSION THAT THEY COULD GIVE TO YOU OR 18 WHAT THE CONTEXT FOR THOSE DOCUMENTS WERE, DID YOU? 19 A. WELL, AS YOU AND I KNOW, I HAVE NEVER HAD ANY CONTACT ON THAT SUBJECT OR ANY OTHER RESEARCH WITH ANYBODY 20 AT R.J. REYNOLDS. 21 22 Q. SIR --A. I WOULD NOT -- AS YOU ASKED ME IN MY 23 DEPOSITION, 24 I WOULD NOT ASK AN ATTORNEY TO FURNISH ME WITH THOSE 25 DOCUMENTS SIMPLY BECAUSE -- I MEAN, THINK OF IT, I WOULD 26 COME HERE AND SAY "YEAH, I LOOKED AT THESE DOCUMENTS. THESE 27 ARE THE ONES THE COMPANY GAVE ME. I MEAN, THAT WOULD BE SO 28 UNSCIENTIFIC, AND SO INVALID. 4531 1 SO NO, I WASN'T GOING TO GO TO R.J. REYNOLDS AND 2 SAY, "HEY, GIVE ME THE DOCUMENTS." Q. YOU NEVER ASKED AN ATTORNEY FROM R.J. REYNOLDS 3

IF	
4	YOU COULD HAVE ACCESS TO THE INTERNAL DOCUMENTS OF THE
5	COMPANY, OF THE R.J. REYNOLDS COMPANY; IS THAT TRUE?
6	MR. ESCHER: OBJECTION, YOUR HONOR. THIS
7	QUESTION HAS BEEN ASKED AND ANSWERED.
8	THE COURT: YOU'VE ANSWERED THAT, HAVEN'T YOU?
9	THE WITNESS: I BELIEVE I HAVE.
10	THE COURT: YOU CAN GO AHEAD AND ANSWER ONE
MORE	
11	TIME. LET'S NOT BE REPETITIVE ON THIS.
12	YOU CAN ANSWER IT ONE MORE TIME, BUT LET'S NOT
GO	
13	BACK OVER THIS.
14	THE WITNESS: NO, I DIDN'T GO TO THE ATTORNEYS
15	AND SAY, "GIVE ME ACCESS TO OR GIVE ME THE DOCUMENTS."
16	MS. CHABER: Q. SIR, IF I UNDERSTAND
17	CORRECTLY, HAD YOU LOOKED AT ANY DOCUMENTS, IT WOULD BE
18	IRRELEVANT TO YOUR OPINIONS, NO MATTER WHAT THEY SAID,
19	CORRECT?
20	A. WELL, IT IS NOT WHAT I WAS LOOKING AT.
21	I WAS NOT THERE TO EVALUATE INTERNAL COMPANY
22	DOCUMENTS. THAT'S THE POINT.
23	Q. IT WOULD BE IRRELEVANT TO YOUR OPINIONS, WOULD
IT	~

24 25 WAS	NOT, NO MATTER WHAT IT SAID; IS THAT CORRECT? A. IT WOULD HAVE TO BE IRRELEVANT, BECAUSE THAT
26 27	NOT WHAT I WAS LOOKING AT, WHAT WAS THE INTERNAL COMPANY DOCUMENTS.
28	MS. CHABER: I HAVE NOTHING FURTHER.
4532	
1	THE COURT: MAY DR. MARTIN BE EXCUSED?
2	MR. ESCHER: YES, YOUR HONOR.
3	THE COURT: MS. CHABER, MAY HE BE EXCUSED?
4	MS. CHABER: YES.
5	THE COURT: YOU ARE EXCUSED.
6	(WITNESS EXCUSED)
7	THE COURT: OKAY. WHO IS CALLING THE NEXT
_	WITNESS AND WHO IS THE NEXT WITNESS?
9	MR. FURR: R.J. REYNOLDS CALLS DR. WILLIAM
	WECKER.
11	THE CLERK: PLEASE COME FORWARD. PLEASE STAND
	RIGHT HERE AND RAISE YOUR RIGHT HAND. THIS WAY, PLEASE.
13	TESTIMONY OF
14	WILLIAM WECKER, PH.D,
	A WITNESS CALLED ON BEHALF OF THE DEFENSE, HAVING BEEN
DULY	CHARLE THE AC HALLOWS.
16 17	
17	THE CLERK: PLEASE STATE YOUR NAME.

18 19 20 21 22 23 24	THE WITNESS: WILLIAM WECKER, W-E-C-K-E-R. THE CLERK: THANK YOU. PLEASE TAKE THE STAND. MR. FURR: YOUR HONOR, LET ME HAND THE CLERK THREE-HOLE COPIES OF THE DEMONSTRATIVES FOR DR. WECKER. I ALSO HAVE A COPY FOR THE COURT, SINCE HE'S UNABLE TO SEE WHAT WE ARE TALKING ABOUT. THE COURT: OKAY. THANK YOU.
25	
26	DIRECT EXAMINATION
27 28	BY MR. FURR: Q. GOOD MORNING, DR. WECKER. A. GOOD MORNING.
4533	
1	Q. WOULD YOU BEGIN BY INTRODUCING YOURSELF TO THE
2	JURY, PLEASE.
3	A. I'M WILLIAM WECKER. I LIVE HERE, NEARBY IN
4	NOVATO, CALIFORNIA, JUST NORTH A COUPLE OF MINUTES.
5	Q. DR. WECKER, YOU ARE A STATISTICIAN; IS THAT
6	CORRECT?
7	A. THAT'S RIGHT.
8	Q. YOU ARE MARRIED, AREN'T YOU, SIR?
9	A. YES.
10	Q. HOW LONG HAVE YOU BEEN MARRIED?
11	A. I BETTER GET THIS RIGHT.

Q. THIS IS NOT A GOOD START FOR A STATISTICIAN, 12 12 Q. 13 DOCTOR. 14 A. 35 YEARS. 15 Q. LET ME ASK AN EASIER QUESTION. 16 HOW MANY CHILDREN DO YOU HAVE? 17 A. THREE, AND ONE GRANDCHILD. Q. OKAY. NOW, YOU ARE A PH.D. STATISTICIAN, NOT A 18 19 MEDICAL DOCTOR; IS THAT CORRECT? A. THAT'S RIGHT. 20 21 DR. WECKER, YOU ARE NOT HERE TO OFFER MEDICAL 22 OPINIONS IN THIS CASE, ARE YOU, SIR? A. THAT'S RIGHT. 23 Q. FOR EXAMPLE, YOU ARE NOT HERE TO OFFER AN OPINION 25 AS TO THE CAUSE OF MRS. WHITELEY'S CANCER, ARE YOU, SIR? 20 27 A. I'M NOT. Q. I HAVE ASKED YOU TO COME HERE AND PROVIDE 28 OPINIONS AS A STATISTICIAN, CORRECT? 4534 1 A. THAT'S RIGHT. Q. OKAY. WELL, THE JURY HAS HEARD A LOT ABOUT 2 STATISTICS BUT WE HAVEN'T HAD A STATISTICIAN TESTIFY YET. COULD YOU BEGIN BY EXPLAINING TO THE JURY WHAT 5 PROFESSIONAL STATISTICIANS DO FOR A LIVING.

- 6 A. WELL, WE'RE THE ONES THAT ARE NOT PURELY RESEARCHERS, THAT ACTUALLY DO STATISTICS. THEY COLLECT 7 DATA AND THEY ANALYZE DATA. THEY'RE INVOLVED FROM BEGINNING TO 8 9 END IN THE DESIGN OF THE DATA COLLECTION SYSTEM, SOMETIMES 10 CALLED THE EXPERIMENT, THROUGH THE ACTUAL COLLECTION OF THE 11 DATA. AND THEN THE ANALYSIS, THE STATISTICIAN 12 13 DETERMINES WHAT MAY THEN VALIDLY BE SAID ABOUT THE DATA THAT HAS BEEN COLLECTED.
- 15 Q. LET ME APPROACH IT THIS WAY. 16 THE JURY HAS HEARD A LOT ABOUT EPIDEMIOLOGY. LET 17 ME ASK YOU TO EXPLAIN TO THE JURY HOW STATISTICS IS RELATED 18 TO EPIDEMIOLOGY. 19 A. EPIDEMIOLOGY IS STATISTICS. STATISTICS CAN BE 20 APPLIED AND IS APPLIED TO A WHOLE RANGE OF DIFFERENT

14

AREAS. 21 WHEN STATISTICS IS APPLIED TO ISSUES OF HUMAN HEALTH, WE CALL IT THEN EPIDEMIOLOGY. 23 Q. DR. WECKER, I WANT YOU TO ASSUME THAT CERTAIN OF 24 PLAINTIFFS' EXPERTS, INCLUDING DR. DAVIS, HAVE TESTIFIED 25 THAT 420,000 DEATHS ARE CAUSED EACH YEAR BY SMOKING. 26 DO YOU UNDERSTAND? 27 A. YES. 28 Q. I WOULD ALSO LIKE FOR YOU TO ASSUME THAT CERTAIN 4535 OF PLAINTIFFS' EXPERTS HAVE TESTIFIED, AGAIN INCLUDING DR. 1 2 DAVIS, THAT ONE-IN-TWO REGULAR LONG-TERM SMOKERS WILL DIE AS 3 A RESULT OF A DISEASE CAUSED BY THEIR SMOKING. 4 ARE YOU WITH ME THERE, SIR? 5 A. YES. 6 Q. DR. WECKER, ARE YOU FAMILIAR WITH THE TYPES OF 7 ANALYSES THAT HAVE BEEN PERFORMED TO REACH THOSE TYPES OF 8 SMOKING-RELATED MORTALITY ESTIMATES? 9 A. YES, I'M FAMILIAR WITH THOSE. 10 Q. AND ARE THOSE TYPES OF ANALYSES STATISTICAL IN 11 NATURE? A. YES, THEY'RE ENTIRELY STATISTICAL IN THAT THEY 12 13 RESULT IN FROM A STATISTICAL FORMULA. Q. AND DR. WECKER, ARE YOU PREPARED TO OFFER TO 14 THE 15 JURY YOUR EXPERT STATISTICAL OPINION AS TO WHETHER OR NOT

- 16 THOSE ANALYSES THAT I HAVE ASKED YOU TO ASSUME ARE ACCURATE
- 17 AND RELIABLE FROM A STATISTICAL PERSPECTIVE?
- 18 A. YES, I CAN OFFER AN OPINION ON THAT.
- 19 Q. BEFORE WE GET TO YOUR OPINIONS, LET'S BACK UP,
- 20 AND LET ME ASK YOU TO DESCRIBE YOUR FORMAL EDUCATION AND
- 21 EXPERIENCE AS A STATISTICIAN.
 - AND LET'S START WITH THE EDUCATION.
- 23 A. OKAY. I GRADUATED IN 1963 FROM THE UNITED STATES
- 24 AIR FORCE ACADEMY. AND THEN, AFTER A NUMBER OF YEARS OF
- 25 MILITARY SERVICE, I RETURNED AS A CIVILIAN TO THE UNIVERSITY
- 26 OF MICHIGAN, WHERE I RECEIVED THE MASTER OF SCIENCE AND THE
- 27 PH.D. DEGREE IN STATISTICS AND APPLIED MATHEMATICS. THAT
- 28 WAS ABOUT 1972.

4536

22

- 1 Q. YOU GOT YOUR PH.D. IN STATISTICS AND APPLIED
- 2 MATHEMATICS FROM THE UNIVERSITY OF MICHIGAN IN 1972?
- 3 A. RIGHT.
- 4 Q. NOW, YOU MENTIONED THAT YOU -- THERE WAS A PERIOD

OF TIME IN WHICH YOUR EDUCATION WAS INTERRUPTED FOR MILITARY 6 SERVICE; IS THAT CORRECT, SIR? 7 A. YOU CAN PUT IT THAT WAY. I DIDN'T THINK IT WAS 8 INTERRUPTED. Q. THAT'S NOT THE WAY YOU PUT IT? 9 10 A. IT WASN'T INTERRUPTED. IT WAS MY PROFESSIONAL 11 DUTY. I WAS AN OFFICER IN THE AIR FORCE FOR A NUMBER OF 12 YEARS. IN FACT, YOU WERE A FIGHTER PILOT IN THE AIR 13 14 FORCE FOR A NUMBER OF YEARS, WEREN'T YOU, SIR? 15 A. YES. 16 Q. LET'S GO BACK TO YOUR EDUCATION. 17 AFTER YOU RECEIVED YOUR PH.D., WHAT DID YOU DO 18 NEXT PROFESSIONALLY? 19 A. I ACCEPTED A JOB ON THE FACULTY AS AN ASSISTANT 20 PROFESSOR AT THE UNIVERSITY OF CHICAGO. Q. HOW LONG WERE YOU AT THE UNIVERSITY OF CHICAGO? 21 22 A. ABOUT 12 YEARS. Q. AND DID YOU TEACH APPLIED MATHEMATICS AND 23 STATISTICS AT THE UNIVERSITY OF CHICAGO? 24 A. YES, I DID, AS WELL AS THEORETICAL AREAS. 25 Q. DID YOU ALSO CONDUCT RESEARCH IN MATHEMATICAL 26 AND 27 STATISTICAL AREAS WHILE YOU WERE AT THE UNIVERSITY OF 28 CHICAGO?

```
4537
1
           A. YES. THAT'S A MAJOR RESEARCH UNIVERSITY. SO
IF
 2
     ANYTHING, THE LION'S SHARE OF THE JOB WAS RESEARCH.
                I ASSUME YOU CAME IN AS AN ASSISTANT PROFESSOR;
     IS THAT CORRECT?
 5
            A. RIGHT.
            Q. WERE YOU SUBSEQUENTLY PROMOTED TO ASSOCIATE
 6
    PROFESSOR?
 7
 8
            A. RIGHT. THAT'S THE NEXT ONE.
            Q.
 9
                YOU STAYED THERE FOR ABOUT 12 YEARS.
10
                THEN IN 1984, YOU LEFT THE UNIVERSITY OF
CHICAGO,
11 CORRECT?
12
            A. RIGHT.
13
            Q. AND WHERE DID YOU GO FROM THERE?
           A. I ACCEPTED AN OFFER FROM THE UNIVERSITY OF
15 CALIFORNIA AT DAVIS.
            Q. WHAT TYPE OF POSITION WAS THAT AT THE
UNIVERSITY
17 OF CALIFORNIA?
18
           A. IT'S EXACTLY THE SAME THING, TEACHING AND
19 RESEARCH IN THE GRADUATE SCHOOL. DOING THE SAME KIND OF 20 WORK, JUST DOING IT IN A NICER CLIMATE.
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21 Q. DR. WECKER, WE HAVE BEEN DOING PRETTY WELL SO 2.2 FAR. ONE THING YOU HAVE TO BE CAREFUL ABOUT, THAT YOU ALLOW 23 ME TO FINISH MY QUESTION BEFORE YOU BEGIN ANSWERING THE QUESTION, BECAUSE THE COURT REPORTER HAS TROUBLE GETTING US 25 BOTH AT THE SAME TIME. OKAY? 26 A. I UNDERSTAND. 27 NOW, AT THE UNIVERSITY OF CALIFORNIA, YOU Q. BECAME 28 A FULL PROFESSOR; IS THAT CORRECT? 4538 1 A. YES. Q. AND AS A FULL PROFESSOR, DID YOU HAVE A TENURED 2 3 POSITION? A. YES. Q. WHAT DOES IT MEAN TO HAVE A TENURED POSITION? 5 6 A. THAT'S A UNIVERSITY THING. IT MEANS, BASICALLY, UNLESS YOU SHOOT SOMEBODY, THEY CAN'T FIRE YOU. 8 Q. SO YOU WERE THERE FOR LIFE, I TAKE IT, BARRING 9 THE TYPE OF OFFENSE THAT YOU JUST DESCRIBED? 10 A. YES. 11 Q. WHAT WERE YOU DOING AT THE UNIVERSITY OF

12 CALIFORNIA? 13 A. SAME THING AS THE UNIVERSITY OF CHICAGO. 14 TEACHING AND RESEARCH AND STATISTICS AND APPLIED 15 MATHEMATICS. 16 IF THERE IS WAS ANY DIFFERENCE AT ALL, I DID MORE 17 WORK IN COMPUTER SCIENCE, BECAUSE COMPUTERS WERE BECOMING 18 MORE AND MORE IMPORTANT AS TIME WENT ON. 19 Q. WHAT TYPE OF RESEARCH WERE YOU INVOLVED IN AT THE 20 UNIVERSITY? 21 A. MAINLY STATISTICAL METHODS, AND BETTER, MORE 22 POWERFUL WAYS TO ANALYZE DATA, ARRIVE AT VALID CONCLUSIONS. 23 Q. DID YOU ALSO BEGIN DOING WHAT IS KNOWN AS 24 CONSULTING ON STATISTICAL ISSUES WHILE YOU WERE AT THE 25 UNIVERSITY OF CALIFORNIA? A. ACTUALLY, I HAD DONE SOME CONSULTING FROM THE 27 EARLIEST DAYS THAT I WAS A PROFESSOR. AND I CONTINUED FROM 28 TIME TO TIME TO DO CONSULTING AT THE UNIVERSITY OF 4539 1 CALIFORNIA, BUT NOT VERY MUCH, BECAUSE MOST OF MY TIME WAS TAKEN UP BY MY JOB AS A PROFESSOR.

Q. AND YOU LEFT THE UNIVERSITY OF CALIFORNIA

AROUND	
4 1990; IS THAT CORRECT?	
5 A. 1990, RIGHT.	
6 Q. AND WHAT DID YOU DO NEXT WHEN YOU LEFT THE	
7 UNIVERSITY?	
8 A. I STARTED A CONSULTING FIRM.	
9 Q. WHAT'S THE NAME OF YOUR CONSULTING COMPANY	2
10 A. WILLIAM WECKER & ASSOCIATES, INCORPORATED.	•
11 Q. THAT'S WHAT YOU ARE STILL DOING TODAY?	
12 A. THAT'S WHAT I DO TODAY. I RUN A CONSULTIN	G
FIRM.	•
13 O. WHAT IS THE NATURE OF THE TYPE OF WORK THA	Г
YOUR	
14 COMPANY DOES?	
15 A. STATISTICAL AND APPLIED MATHEMATICS WORK.	
16 MY SON ASKED ME THAT ONCE. I SAID, "IT'S	SORT
OF	
17 LIKE DOING OTHER PEOPLE'S HOMEWORK. WHEN THEY HAVE A	HARD
18 PROBLEM, A COMPANY OR A GOVERNMENT, THAT'S STATISTICA	L IN
19 NATURE, THEY CALL US. WE SOLVE IT."	
Q. AFTER YOU LEFT THE UNIVERSITY OF CALIFORNI	A IN
21 1990 AND OPENED YOUR OWN CONSULTING COMPANY, HAVE YOU	
22 CONTINUED TO DO SOME TEACHING AT THE UNIVERSITY LEVEL	?
A. YES. NOT AS MUCH AS I USED TO WHEN IT WAS	MY

24 FULL-TIME JOB, BUT I HAVE CONTINUED TO TEACH AND RESEARCH AT25 A LOWER LEVEL OF ACTIVITY. 26 I HAVE BEEN TEACHING AT STANFORD LATELY. I ALSO 27 TAUGHT AT THE UNIVERSITY OF CHICAGO AND I WENT ONCE TO 28 CZECHOSLAVAKIA, TAUGHT AT THE CZECHOSLAVAKIA TECHNOLOGICAL 4540 1 INSTITUTE AFTER I LEFT UC DAVIS. 2 Q. DR. WECKER, I'M LOOKING AT YOUR CV. IT APPEARS 3 THAT ALSO YOU'VE PUBLISHED IN PEER-REVIEWED STATISTICAL AND 4 MATHEMETICAL JOURNALS; IS THAT CORRECT? 5 A. THAT'S CORRECT. 6 Q. AND YOUR CV INDICATES YOU WERE EDITOR OF THE 7 JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION; IS THAT 8 CORRECT? 9 THAT'S CORRECT. Α. 10 Q. WHAT IS THE JOURNAL OF THE AMERICAN STATISTICAL 11 ASSOCIATION? A. FIRST, THE AMERICAN STATISTICAL ASSOCIATION IS 12 13 THE PROFESSIONAL ASSOCIATION OF THE UNITED STATES FOR 14 STATISTICIANS, JUST LIKE THE AMERICAN MEDICAL ASSOCIATION IS 15 THE PROFESSIONAL ASSOCIATION FOR MEDICINE.

16 17 18 19	AND OUR ASSOCIATION PUBLISHES A NUMBER OF PROFESSIONAL JOURNALS WHERE THE RESULTS OF RESEARCH GET PUBLISHED. AND THE FLAGSHIP JOURNAL, THE NO. 1 JOURNAL OF
20 21 THE	THE PROFESSION IS THE JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION. IT'S REALLY, I THINK, THE NO. 1 JOURNAL IN
22 23 24	WHOLE WORLD. Q. YOUR CV INDICATES THAT ARE YOU EDITOR ON THEORY AND METHODS TYPE OF PUBLICATIONS.
25 26	WHAT DOES THAT MEAN? A. WELL, FIRST, TO EXPLAIN THE EDITOR ROLE, THEY
0.7	ODEDATE THE DEED DEVITED DOCUME TOO THE TOURNAL
27 28	OPERATE THE PEER-REVIEW PROCESS FOR THE JOURNAL. LET'S SAY THAT YOU HAD A BRAND-NEW IDEA IN
4541	
1	STATISTICS AND YOU WROTE IT DOWN IN A MANUSCRIPT AND YOU
2	WANTED TO HAVE IT PUBLISHED FOR THE WHOLE WORLD TO
3	UNDERSTAND.
4 5	AND YOU MIGHT IF YOU THOUGHT IT WAS REALLY IMPORTANT, YOU MIGHT SEND IT TO THE JOURNAL OF THE
AMERT	
6 HAVE	

- 7 THE MOST VISIBILITY.
- 8 THEN YOUR MANUSCRIPT MIGHT WELL LAND ON MY DESK.
- 9 I'D LOOK AT IT, AND IF ON ITS FACE I THOUGHT IT WAS NOT
- 10 PUBLISHABLE, I'D JUST SEND IT BACK TO YOU WITH A POLITE
- 11 NOTE
- 12 IF IT LOOKED LIKE A SERIOUS PAPER, THEN I WOULD
- 13 APPOINT REFEREES, USUALLY THREE OF THEM, THAT WERE EXPERTS,
- THE WORLD'S BEST EXPERTS I COULD FIND IN THE AREA YOU WERE PUBLISHING.
- 16 I WOULD MAIL A COPY OUT TO ALL THOSE PEOPLE,
- 17 SOMETIMES IN THE UNITED STATES, SOMETIMES IN OTHER
- 18 COUNTRIES, AND THEY'D CHECK IT OVER CAREFULLY, AND WRITE A
- 19 REPORT AND SEND IT BACK TO ME AS THE EDITOR.
- 20 AND THEN, THESE ARE THE CRITERIA THAT I WOULD
- 21 APPLY FIRST. IT HAD TO BE RIGHT. BUT THAT WOULDN'T BE
- 22 ENOUGH. IT ALSO HAD TO BE NEW, BECAUSE IF IT WAS RIGHT
- BUT
- 23 SOMEBODY ELSE DID IT ALREADY, THEN IT WOULDN'T GET
- 24 PUBLISHED. THAT'S NOT ENOUGH EITHER.
- 25 IT COULDN'T BE PUBLISHED ONLY IF IT WAS CORRECT
- 26 AND NEW. IT ALSO HAD TO BE IMPORTANT, A MAJOR
- CONTRIBUTION
- TO THE AREA. BECAUSE WE GET MANY, MANY MORE MANUSCRIPTS
- THAN WE CAN POSSIBLY PUBLISH.

4542 1 BUT IF YOU WERE CORRECT AND BRAND-NEW AT YOUR 2 IDEA, AND IT WAS A REALLY IMPORTANT CONTRIBUTION, THEN YOU'D GET PAST THE EDITOR. YOU WOULD FIND YOURSELF A PUBLISHED AUTHOR IN THE JOURNAL OF AMERICAN STATISTICAL ASSOCIATION. 5 LET ME ASK YOU. IT SOUNDS TO ME LIKE YOU WERE DESCRIBING THE ROLE OF AN EDITOR IN A GENERAL SENSE; IS 6 THAT 7 CORRECT? 8 WHAT I AM GETTING AT IS, I THINK THAT WHAT I MEANT TO ASK YOU ALSO IS TO EXPLAIN TO US WHAT IS THE 9 NATURE 10 OF THE ARTICLES THAT YOU RECEIVED IN THE THEORIES AND 11 METHODS SECTION. 12 A. WELL, STATISTICAL THEORY AND METHODS --13 THE COURT: GO AHEAD. I WAS JUST TRYING TO GET 14 MR. FURR'S EYE. 15 MR. FURR: YES. 16 THE COURT: WHEN YOU GET TO A LOGICAL POINT, WE 17 NEED TO TAKE A RECESS.

18 19 20	GO AHEAD AND ANSWER THE QUESTION. THE WITNESS: THANK YOU, YOUR HONOR. THE JOURNAL IS DIVIDED INTO TWO AREAS,	
21	APPLICATIONS, AND THEORY AND METHODS. AND I WAS THE	
THEORY		
22	AND METHODS SIDE OF THE HOUSE.	
23	AND IT'S THAT'S WHERE NEW STATISTICAL	
METHODS		
24	ARE DEVELOPED, MORE POWERFUL FORMULAS, BETTER WAYS OF	
25	LOOKING AT THINGS, THE NEW IDEAS.	
26	APPLICATIONS ARE ALSO IMPORTANT, BUT THAT WAS	
27		
28	MR. FURR: OKAY. THIS IS FINE, YOUR HONOR.	
4543		
1	THE COURT: OKAY, JURORS. PLEASE CONTINUE TO	
2	FOLLOWING THE ADMONITION.	
3	LET'S TAKE A 20-MINUTE RECESS UNTIL 20 AFTER	
4	11:00. WE'LL SEE YOU BACK AT 20 AFTER 11:00.	
5	(RECESS TAKEN FROM 11:00 TO 11:30 A.M.)	
6	THE COURT: OKAY. WE ARE BACK ON THE RECORD	
AND	DEADY TO GO MD DUDD	
7	READY TO GO, MR. FURR.	
8 9	MR. FURR: THANK YOU, YOUR HONOR.	
9	Q. DR. WECKER, LET'S GO BACK TO YOUR CV FOR JUST A	

10	MOMENT.
11	I SEE THAT YOU SERVED ON THE NATIONAL ADVISORY
12	COUNCIL ON ENVIRONMENTAL POLICY AND TECHNOLOGY; IS THAT
13	CORRECT?
14	A. YES.
15	Q. WHAT TYPE OF WORK DID YOU DO ON THAT COMMITTEE?
16	A. I WORKED AS A STATISTICIAN ON THE COMMITTEE.
17	Q. WHAT WAS THE NATURE OF THE ISSUES THAT YOU WERE
18	WORKING ON?
19	A. WELL, PERHAPS A LITTLE BACKGROUND ON WHAT THE
20	COMMITTEE IS.
21	Q. PLEASE.
22	A. THIS IS A COMMITTEE ESTABLISHED BY ACT OF
23	CONGRESS THAT ADVISES THE UNITED STATES GOVERNMENT ON
24	MATTERS OF ENVIRONMENTAL POLICY.
25	AND WE LOOKED AT ALL DEPARTMENTS OF GOVERNMENT,
26	INCLUDING THE EPA, NOT JUST THE EPA. WE LOOKED AT THE
27	VARIOUS PROGRAMS, LIKE TRY TO GIVE RECOMMENDATIONS ON HOW
28	THEY WOULD BASICALLY BEST SPEND OUR TAX DOLLARS. IF THEY
4544	
1	HAD AN EXTRA DOLLAR TO SPEND AND THEY WANTED TO USE IT TO
2	REDUCE POLLUTION, WHERE SHOULD THEY SPEND IT.
3	THAT'S THE WAY I LOOKED AT THE JOB

4	Q. WERE YOU COMPENSATED FOR YOUR WORK ON THE
5	NATIONAL ADVISORY COUNCIL?
6	A. NO, I DO THAT KIND OF WORK AS A VOLUNTEER.
7	Q. WE MENTIONED A FEW MOMENTS AGO THAT YOU'VE ALSO
8	DONE SOME PUBLISHING IN PROFESSIONAL JOURNALS, INCLUDING
9	PEER-REVIEWED JOURNALS?
10	A. CORRECT.
11	Q. HAVE THOSE PUBLICATIONS BEEN IN THE FIELD OF
12	APPLICATION STATISTICS AND MATHEMATICS?
13	A. YES, MATHEMATICS AND STATISTICS.
14	Q. HOW MUCH OF YOUR TIME DO YOU CURRENTLY SPEND
15	CONDUCTING RESEARCH AND WRITING AND WORKING ON OTHER TYPES
16	OF MATTERS FOR WHICH YOU'RE NOT COMPENSATED BY ANY CLIENT?
17	A. OH, IF YOU COUNT IN REFEREEING PAPERS AS WELL,
18	IT'S ABOUT A THIRD OF MY TIME.
19	Q. YOU SPEND MOST OF YOUR TIME NOW WORKING AS A
20	CONSULTANT ON STATISTICAL PROBLEMS; CORRECT?
21	A. YES.
22	Q. LET'S TALK A LITTLE BIT ABOUT THE FIRM THAT YOU
23	HAVE FOUNDED AND THE NATURE OF THE TYPE OF CONSULTING THAT
24	YOUR FIRM DOES.
25	WOULD YOU GIVE THE JURY SOME EXAMPLES OF THE
26	TYPES OF COMPANIES THAT COME TO YOU FOR ADVICE, ANALYSIS,
TO	
27	ANSWER ON STATISTICAL ISSUES.
28	A. IT'S JUST EVERY KIND THAT YOU COULD IMAGINE.

20

AFTER	
11	THE BERLIN WALL CAME DOWN. CZECHOSLOVAKIA WAS TOTALLY A
12	COMMUNIST COUNTRY. EVERYTHING WAS OWNED BY THE STATE;
13	HARDLY ANY PRIVATE PROPERTY.
14	THE PROBLEM WAS HOW TO GET THE PROPERTY IN THE
15	HANDS OF INDIVIDUAL CITIZENS IN A WAY THAT WAS FAIR AND
16	SHARPIES DIDN'T TAKE ADVANTAGE. NOT AN EASY PROBLEM.
17	I WORKED ON THAT WITH HIM FOR SEVERAL MONTHS,
AND	
18	RECRUITED A TEAM, INCLUDING TWO NOBEL PRIZE WINNERS, TO
HELP	
19	WITH THE WORK. AND FINALLY, I GAVE I THINK GOOD COUNSEL
ON	
20	THAT PROJECT.
21	Q. BASED ON THE LIST YOU GAVE US A FEW MINUTES
AGO,	
22	IT SOUNDS LIKE THE TYPES OF CLIENTS THAT COME TO YOUR FIRM
23	FOR ASSISTANCE ON STATISTICAL ISSUES COVER A WIDE RANGE OF
24	INDUSTRIES AND COMPANIES; IS THAT CORRECT?
25	A. THAT IS TRUE.
26	Q. IS THERE SORT OF A UNIFYING PRINCIPLE IN WHAT
27	THESE COMPANIES COME TO YOU FOR?
28	IN OTHER WORDS, DOES YOUR COMPANY HAVE A
4547	
1	SPECIALTY AREA IN THE FIELD OF STATISTICS THAT YOUR

CLIENTS

- 2 COME TO YOU FOR ASSISTANCE WITH?
- 3 A. WELL, THERE IS A COUPLE OF SPECIALTY AREAS, I
- 4 THINK THAT WE HAVE.
- 5 FIRST, BECAUSE WE'RE A PRODUCT OF THE

UNIVERSITY,

- 6 WE ARE A FAIRLY HIGH-POWERED GROUP, THEORETICALLY. SO IF
- 7 YOU HAVE A HARD PROBLEM THAT YOUR OWN RESEARCH GROUP JUST
- 8 CAN'T CRACK, THEN WE'RE LIKELY THE NUMBER YOU ARE GOING TO
- 9 CALL.
- 10 THERE'S ANOTHER FEATURE THAT I THINK SEEMS TO

BE

- 11 COMMON, AND THAT IS, IF YOU HAVE A HUGE DATABASE, BECAUSE
- 12 THEY PRESENT SPECIAL PROBLEMS, AND I SEE IT -- FOR

${\tt EXAMPLE}$,

- 13 IN THE AIRLINE CASE, WHERE YOU CAN IMAGINE THE VOLUME OF
- 14 ACTIVITY IN THE RESERVATION SYSTEM. THAT WAS THE REASON
- 15 THEY NEEDED HELP.
- 16 IF THEY WERE JUST ONE RESERVATION A DAY, THEY
- 17 WOULDN'T NEED MUCH MORE.
- 18 ANOTHER EXAMPLE, AND I THINK WILL

SATISFACTORILY

- ANSWER YOUR QUESTION, WOULD BE THE RAILROADS, WHERE WE
- 20 WORKED ON THE MERGER OF THE SOUTHERN PACIFIC AND UNION

21	PACIFIC.
22	AND THEY HAD TO FIGURE OUT HOW ALL THE TRAFFIC
23	WOULD OPERATE AFTER THE RAILS WERE MERGED. MILLIONS OF
24	MILES AND MILLIONS OF TRAFFIC MOVEMENT.
25	SO A COMMON THREAD HERE THAT I SEE IS MASSIVE
26	DATABASES.
27	Q. LET ME ASK YOU ONE FOLLOW-UP QUESTION.
28	YOU ALSO SAID THAT WORKING ON HUGE OR MASSIVE
4548	
1	DATABASES CAN PRESENT SPECIAL TYPES OF STATISTICAL
2	PROBLEMS.
3	COULD YOU EXPLAIN WHAT YOU MEAN BY THAT.
4	A. FOR EXAMPLE, IT REQUIRES SPECIALIZED EQUIPMENT,
5	AND NOT EVEN BIG COMPANIES MAY NOT HAVE THE RIGHT
6	EQUIPMENT TO HANDLE THIS SCIENTIFIC COMPUTING EQUIPMENT,
THE	
7	KIND OF THING YOU FIND AT A UNIVERSITY.
8	BUT EVEN A BIG AIRLINE MAY NOT HAVE THIS SORT
OF	
9	EQUIPMENT, SPECIALIZED SOFTWARE AND SO ON. AND I THINK IT
10	REQUIRES EXPERTISE, PEOPLE WHO DO THIS FOR A LIVING, AND
11	HAVE ADVANCED TRAINING IN HOW TO DO IT.
12	NOT EVERY COMPANY, EVEN LARGE COMPANIES, HAVE
13	THIS KIND OF PEOPLE.
14	O. WHAT TYPES OF SPECIAL SCIENTIFIC COMPUTING

15 EQUIPMENT DOES YOUR FIRM USE TO ADDRESS THESE TYPES OF 16 MASSIVE DATABASES? 17 A. WE HAVE LOTS OF DIFFERENT EQUIPMENT, BUT THE MAIN 18 ONE FOR THE BIG DATABASES IS IBM, CALLED A RISC SYSTEM 6000, R-I-S-C. RISC IS A SCIENTIFIC COMPUTER. 20 YOU MAY RECALL A COUPLE OF YEARS AGO WHEN THERE 21 WAS A CHESS CONTEST BETWEEN A COMPUTER AND GARRY KASPAROV 22 AND THE IBM COMPUTER. THAT WAS THE KIND OF COMPUTER. IT'S THE SAME MODEL. 23 Q. THE COMPUTER WON? 24 25 A. NO. RISC SYSTEM 6000. THEY CALLED IT "BIG BLUE" 26 OR SOMETHING LIKE THAT. 27 Q. YOU HAVE TESTIFIED IN THE PAST IN COURTROOMS AS 28 AN EXPERT IN STATISTICS, HAVEN'T YOU, DR. WECKER? 4549 A. YES, I HAVE. 1 Q. CAN YOU GIVE US AN ESTIMATION OF HOW MANY TIMES 3 YOU'VE TESTIFIED IN THE PAST.

A. OH, IN MAYBE OVER 20 YEARS, PROBABLY 20 TIMES.

- Q. HAVE YOU ALSO TESTIFIED IN THE PAST AS A 6 COURT-APPOINTED EXPERT IN STATISTICS? 7 A. YES, I HAVE BEEN A COURT-APPOINTED EXPERT. 8 Q. AND COULD YOU DESCRIBE THE TYPE OF WORK YOU DID 9 AS A COURT-APPOINTED EXPERT IN STATISTICS. 10 A. YES. THAT'S A LITTLE UNUSUAL IN MY EXPERIENCE AS 11 A COURT-APPOINTED EXPERT. 12 THIS WAS IN CALIFORNIA, A MATTER BETWEEN THE BANK 13 OF AMERICA AND THE STATE OF CALIFORNIA, HAVING TO DO WITH 14 THE INDIVIDUAL BANK ACCOUNTS AT THE BANK OF AMERICA ALL OVER 15 THE STATE, ALL THE WAY BACK INTO THE '40S. A HUGE DATABASE 16 AGAIN, MESSY DATABASE. 17 AND THE ISSUE IS, IF SOMEONE DIES OR OTHERWISE FORGETS ABOUT THEIR ACCOUNT, IT'S DORMANT, I'M NOT AN EXPERT 19 IN THE LAW HERE, BUT THERE'S SOME LAW THAT SAYS THAT MONEY 20 GETS TO BE GIVEN OVER, CARETAKER STATUS, TO THE STATE OF 21 CALIFORNIA. 22 SO THERE WAS AN ISSUE OF WHETHER THAT HAS BEEN 23 DONE RIGHT. THE BANK HAD EXPERTS AND THE STATE HAD

AND IT WAS COMPLICATED.

EXPERTS 24 AN

25 AND FINALLY, THE COURT DECIDED THAT THEY MIGHT 26 WANT THEIR OWN EXPERT TO HELP UNDERSTAND DIFFERENT 27 POSITIONS, AND THE THREE PARTIES SETTLED ON ME, THE BANK AND 28 THE STATE AND THE JUDGE. 4550 1 Q. DR. WECKER, YOU'RE FAMILIAR WITH A DATABASE KNOWN AS THE AMERICAN CANCER SOCIETY'S CPS-II, CANCER PREVENTION SURVEY II, I BELIEVE IT IS? A. YES, I AM. 4 Q. (WRITING ON BOARD) IS THAT TYPICALLY 5 ABBREVIATED 6 AS CPS-II? A. EITHER ONE. USUALLY NOT TOGETHER, WITH A 7 8 HYPHEN. IT'S USUALLY CPS-II OR ACS. O. HAVE YOU TESTIFIED IN THE PAST IN COURTROOMS ON 9 10 YOUR ANALYSES OF THE ACS CPS-II DATABASE? A. YES, I HAVE ANALYZED THAT DATA BEFORE, AND I'VE 12 PRESENTED THE RESULTS OF MY ANALYSIS IN A COURTROOM BEFORE.

14 ON SMOKING-ATTRIBUTABLE DEATH ESTIMATIONS BASED UPON THE

Q. AND SPECIFICALLY, HAVE YOU TESTIFIED IN THE

13

PAST

ACS

http://legacy.library.ucsf.e6u/tid/ban@pa00/pdfv.industrydocuments.ucsf.edu/docs/sqhl0001

15 CPS-II DATABASE? 16 A. YES, I'VE DONE THAT. 17 Q. AND THAT TYPE OF TESTIMONY WAS GIVEN IN OTHER 18 TOBACCO-RELATED LITIGATION, WASN'T IT, SIR? 19 A. THAT'S RIGHT. 20 Q. OKAY. AND YOU WERE CALLED IN THOSE OTHER CASES BY THE R.J. REYNOLDS TOBACCO COMPANY, JUST LIKE YOU ARE 21 BEING CALLED TODAY; CORRECT? 22 23 A. THAT'S RIGHT. 24 AND YOU WERE COMPENSATED FOR THE ANALYSES THAT 25 YOU PERFORMED AND YOUR TIME IN PERFORMING THOSE ANALYSES BY 26 R.J. REYNOLDS FOR YOUR WORK ON THE CPS-II DATABASE, WEREN'T 27 YOU? 28 A. THAT'S RIGHT. 4551 Q. YOU ARE BEING COMPENSATED FOR THE TIME THAT YOU 1 SPENT PREPARING TO TESTIFY TODAY, AREN'T YOU, SIR? A. THAT'S RIGHT. Q. YOU BILL BY THE HOUR? A. 5 YES. 6 Q. WOULD YOU TELL THE JURY WHAT YOUR HOURLY RATE

7 IS. A. MINE IS 395 AN HOUR FOR THIS WORK. 8 9 Q. OKAY. TELL THE JURY WHAT YOU DID TO PREPARE TO 10 TESTIFY TODAY. 11 A. WELL, I REVIEWED THE DATA THAT WE HAVE JUST 12 DISCUSSED, THE BIG AMERICAN CANCER SOCIETY DATABASE. 13 AND I REVIEWED THE LITERATURE ON THE CALCULATIONS OF WHAT IS CALLED ATTRIBUTABLE MORTALITY. AND I REVIEWED 15 THE LITERATURE ON VARIOUS RISK FACTOR INFORMATION FOR 16 MORTALITY, INCLUDING TOBACCO, ALSO INCLUDING NUMEROUS 17 OTHERS, LIKE LACK OF EXERCISE OR DIETS. 18 BY "DIET," I DON'T MEAN LOSING WEIGHT. I MEAN 19 WHAT YOU EAT, LIKE FRIED FOODS OR HIGH-FAT FOODS. THOSE ARE 20 RISK FACTORS. AND OTHER RISK FACTORS. I REVIEWED THAT 21 LITERATURE. O. LET ME BE CLEAR HERE. YOU CONDUCTED YOUR OWN 23 ANALYSES ON THE CPS-II DATABASE; IS THAT CORRECT? 24 A. THAT'S RIGHT. WITH MY OWN COMPUTER AND MY OWN 25 ANALYSIS. 26 Q. AND YOU ALSO REVIEWED THE STATISTICAL 27 EPIDEMIOLOGIC LITERATURE TO IDENTIFY CERTAIN RISK FACTORS 27 THAT HAVE BEEN REPORTED TO BE LINKED WITH AN INCREASED RISK

4552 1 OF MORTALITY OR DEATH; IS THAT CORRECT, SIR? 2 A. LINKED IN VERY A CAREFUL SENSE. STATISTICAL ASSOCIATION, MEANING WHEN YOU FIND A HIGHER AMOUNT OF ONE THING, LIKE FRIED FOODS, YOU TEND TO FIND A HIGHER MORTALITY IN THAT GROUP THAT'S DOING THE EATING OF FRIED FOODS. Q. LET ME ASK YOU, AS A PRELIMINARY MATTER, 6 7 DR. WECKER: CAN STATISTICS ALONE BE USED TO PROVE THAT AN 8 EXPOSURE ACTUALLY CAUSED A DISEASE? 9 A. IT CAN'T PROVE CAUSE AND EFFECT WITH THE KIND OF 10 DATA THAT WE ARE TALKING ABOUT HERE. 11 WE'RE VERY CAREFUL AS STATISTICIANS TO SAY THAT 12 IT SHOWS STATISTICAL ASSOCIATION THAT'S HELPFUL. IT'S NOT 13 LIKE IT'S NOT HELPFUL. IT CAN'T PROVE CAUSE AND EFFECT. 14 IT JUST MEANS THAT THERE'S MORE FRIED FOODS BEING EATEN BY A GROUP. AND IF THERE IS HIGHER MORTALITY, WE 15 16 REPORT THAT WAS A RISK FACTOR FOR MORTALITY. 17 Q. LET ME ASK YOU TO DEFINE A TERM FOR US. 18 ARE YOU FAMILIAR WITH AN EPIDEMIOLOGIC AND 19 STATISTICAL TERM KNOWN AS "CONFOUNDING"? 20 A. YES.

21	0.	(WRITING ON BOARD)
22	Ã.	EPIDEMIOLOGIC AND STATISTICAL.
23	Q.	WOULD YOU EXPLAIN TO US WHAT "CONFOUNDING" IS
IN	~	
24	EPIDEMIOLOG	GIC OR STATISTICAL STUDIES.
25		MR. BROWN: OBJECTION. CALLS FOR AN OPINION
ON		
26	AN AREA ON	WHICH HE'S NOT QUALIFIED AND NO FOUNDATION.
27		THE COURT: OVERRULED.
28		THE WITNESS: "CONFOUNDING" IS A VERY
4553		
	FUNDAMENTAI	L STATISTICAL CONCEPT. LET ME EXPLAIN BY WAY OF
2	EXAMPLE RAT	THER THAN ABSTRACTLY.
3		IN THE EXAMPLE I WAS GIVING OF A GROUP THAT
MIGHT		
4	EAT A LOT (OF FRIED FOODS AND HAVE AN ELEVATED HEALTH
PROBLE	EM	
5	IN CERTAIN	AREAS OR ELEVATED MORTALITY DEATH RATE, WE CAN
6	REPORT THAT	T AS AN ASSOCIATION.
7		BUT WE WOULD RECOGNIZE THAT ALONG WITH THAT
COMES		
8	WHAT WE CAI	LL A CONFOUNDING PROBLEM, BECAUSE THERE ARE
OTHER		
9	VARIABLES 7	THAT HAVEN'T BEEN MENTIONED HERE SO FAR.
10		I SAID "FRIED FOODS" AND I SAID "DEATH RATE."

11 BUT WHAT IF IT TURNS OUT TO BE THE CASE THAT PEOPLE THAT EAT 12 FRIED FOODS ALSO DON'T GET EXERCISE, OR DON'T HAVE OTHER KINDS OF -- OR HAVE OTHER KINDS OF RISK FACTORS, LIKE LACK 13 14 OF SOCIAL SUPPORT IS ONE, AND MAYBE TOXIC EXPOSURES. MAYBE THEY WORK IN A FACTORY. 16 AND SO WHEN YOU JUST LOOK AT ONE FACTOR, LIKE 17 EATING FRIED FOODS, AND YOU NOTICE AN ELEVATED MORTALITY RATE, WITH FURTHER STUDY YOU REALIZE THAT THERE IS A 18 19 CONFOUNDING PROBLEM GOING ON HERE. 20 IT COULD BE WRONG TO JUST SAY THAT THE FRIED 21 FOODS IS ALL THAT THERE IS TO UNDERSTAND HERE, BECAUSE 22 PROBABLY THE ELEVATED MORTALITY IS CONFOUNDED BY OTHER 23 FACTORS THAT ARE LYING THERE YET TO BE LOOKED AT. O. IS CONFOUNDING AN IMPORTANT STATISTICAL PRINCIPLE WITH RESPECT TO THE ANALYSES THAT YOU'RE PREPARED TO PRESENT 26 HERE TODAY? 27 A. YES. Q. I ASKED YOU TO ASSUME THAT DR. DAVIS TESTIFIED 28 4554

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1
     THAT SMOKING CAUSED 420,000 DEATHS PER YEAR IN THE UNITED
    STATES.
3
               DO YOU RECALL THAT?
4
           A. YES.
5
                MR. FURR: COULD I HAVE THE LIGHTS, PLEASE.
                MR. BROWN: I'M GOING TO OBJECT, I THINK, TO
6
THE
7
    NEXT QUESTION, BUT I'M NOT SURE. I'M JUST WAITING.
              MR. FURR: OKAY. WELL, I'LL TRY TO AVOID THE
8
     OBJECTION, BUT I DON'T KNOW WHAT IT IS.
9
10
           Q. COULD YOU STEP DOWN, DR. WECKER.
11
               LET ME ASK YOU TO TAKE A LOOK AT WHAT WAS
MARKED
12 PREVIOUSLY AS PLAINTIFFS' EXHIBIT 1804, WHICH I WILL
PROJECT
13 ON THE SCREEN.
14
                MR. BROWN: COULD I SEE IT FOR ONE SECOND.
                MR. FURR: Q. DR. WECKER, LET ME ASK YOU TO
ASSUME THAT THIS PLAINTIFFS' EXHIBIT 1804 IS THE EXHIBIT
17
    THAT DR. DAVIS REFERENCED WHEN HE TESTIFIED WITH RESPECT
TO
18 HIS OPINION THAT 420,000 --
19
           A. I SEE IT.
20
           Q. IT'S NOT YOU I'M HELPING RIGHT NOW -- THAT
21 420,000 DEATHS WERE CAUSED IN THE UNITED STATES ON AN
ANNUAL
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22 BASIS BY SMOKING. OKAY? 23 A. I UNDERSTAND. 24 Q. YOU SEE THESE LETTERS HERE IN THE BOTTOM CORNER OF THIS EXHIBIT, "CDC"? 26 A. YES. 27 Q. DO YOU KNOW WHAT THE CDC IS? 28 A. YES. 4555 Q. WHAT IS "CDC"? 1 2 Α. CENTER FOR DISEASE CONTROL. IT'S A GOVERNMENT 3 ORGANIZATION. Q. DO YOU KNOW WHETHER THE CDC HAS PUBLISHED AN 4 5 ANALYSIS OF DEATHS ATTRIBUTABLE TO SMOKING IN WHICH THIS 6 420,000 FIGURE WAS PRESENTED? 7 A. YES, I KNOW THAT'S TRUE. 8 Q. ARE YOU FAMILIAR WITH THAT ANALYSIS? 9 A. YES, I HAVE IT HERE, IF YOU WANT. Q. YOU HAVE REVIEWED IT, OBVIOUSLY? 10 11 YES. Α. 12 COULD I HAVE THE LIGHTS, PLEASE. 13 LET ME ASK YOU, DR. WECKER, DO YOU KNOW THE 14 DATABASE OR THE SOURCE OF THE INFORMATION THAT THE CDC USED

15 TO CALCULATE THAT 420,000 ANNUAL DEATHS ESTIMATION? 16 A. YES, I KNOW THE SOURCE OF THE INFORMATION. 17 Q. AND WHAT WAS THE DATABASE USED BY THE CDC? A. THE PRINCIPAL DATA MENTIONED EARLIER, THE 18 19 AMERICAN CANCER SOCIETY DATABASE KNOWN AS CPS-II. Q. BEFORE WE GO ON, THE JURY HAS HEARD SOMETHING 21 ABOUT CPS-II, BUT LET ME ASK YOU TO REVIEW FOR US THE NATURE OF THE STUDY THAT WAS CONDUCTED BY THE AMERICAN CANCER 23 SOCIETY THAT WE REFER TO AS CPS-II. 24 A. OKAY. IT WAS A VERY LARGE STUDY, INVOLVING MORE 25 THAN A MILLION PEOPLE. IT WAS NOT A RANDOM SAMPLE FROM THE 26 UNITED STATES. IT HAS A DEFECT, BUT I'M NOT GOING TO BE 27 TALKING ABOUT THAT DEFECT TODAY, I DON'T BELIEVE. 28 IT WAS JUST VOLUNTEERS FROM, I BELIEVE, THE 4556 1 BOSTON AREA, SOMEWHERE ON THE EAST COAST. AND THESE MILLION PEOPLE, MEN AND WOMEN, WERE 3 ASKED TO FILL OUT A QUESTIONNAIRE DESCRIBING ALL KINDS OF THINGS THAT THE AMERICAN CANCER SOCIETY THOUGHT WAS 5 IMPORTANT TO KNOW, LIKE DIET AND EXERCISE. THERE WERE 6 SMOKING QUESTIONS AND SEVERAL OTHERS. AND THEN, FOUR YEARS LATER, THE AMERICAN CANCER

8	SOCIETY DID A FOLLOW-UP SURVEY, AND THE IMPORTANT RESULT
IN	
9	FOUR-YEAR FOLLOW-UP WAS WHO DIED.
10	AND THEN THEY WOULD RECORD ALL OF THAT. THEY
11	HAVE THE QUESTIONNAIRES, AND THEN THEY HAVE THE FOLLOW-UP
12	DEATH RESULTS.
13	AND THEN THE JOB OF THE STATISTICIAN IS TO SEE
14	WHAT RELATIONSHIPS THERE MIGHT BE.
15	Q. AND HAVE YOU PREPARED SOME EXHIBITS THAT WOULD
16	ASSIST YOU IN EXPLAINING TO THE JURY THE NATURE OF THE
17	INFORMATION THAT THE AMERICAN CANCER SOCIETY ACQUIRED FROM
18	THE 1 MILLION PARTICIPANTS IN THIS STUDY?
19	A. YES, I HAVE.
20	MR. FURR: YOUR HONOR, I'M GOING TO MARK AS
6274,	
21	6275, 6276 AND 6277 FOUR CHARTS THAT ARE BLOWUPS OF THE
22	QUESTIONNAIRE USED BY THE AMERICAN CANCER SOCIETY.
23	(DOCUMENTS MORE PARTICULARLY
24	LISTED IN THE INDEX MARKED
25	FOR IDENTIFICATION DEFENDANTS'
26	EXHIBITS # 6274, 6275, 6276 AND 6277)
27	MR. BROWN: YOUR HONOR, I'M GOING TO OBJECT TO
28	SHOWING THIS TO THE JURY. THEY'RE HEARSAY.

4557	
1	THE COURT: OKAY. DON'T SHOW IT TO THE JURY
2	YET. TURN IT AROUND.
3	THIS DOESN'T HAVE ANY INFORMATION ON IT. THIS
IS	
4	MERELY THE FORM.
5	MR. BROWN: THE INFORMATION IS THE FORM. THE
6	INFORMATION IS THE QUESTION.
7	I'LL ALSO OBJECT ON 352. THIS IS HEARSAY.
IT'S	
8	352 AS WELL.
9	I THINK MAYBE WE OUGHT TO HAVE A CONFERENCE IN
10	THE HALL, BECAUSE IT'S STARTING TO GET MORE COMPLICATED.
11	THE COURT: OKAY.
12	(COURT AND COUNSEL CONFER OUTSIDE
13	THE PRESENCE OF THE JURY)
14	THE COURT: I UNDERSTAND ON THAT CHART THAT
YOU	
15	DON'T HAVE
16	MR. BROWN: I WILL WITHDRAW MY OBJECTION.
17	COULD WE REMOVE THE OBSTRUCTION BETWEEN YOUR
18	HONOR AND MYSELF.
19	THE COURT: YES. YOU WANT TO SEE ME?
20	MR. BROWN: I DO. I MISSED YOU FOR A FEW
21	MINUTES WHILE IT WAS UP THERE.
22	THE COURT: LET ME ASK YOU: IS THERE

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SOMETHING
WE CAN DO PRODUCTIVELY IN THE NEXT TWO OR THREE MINUTES?
24
    IT'S CLOSE TO NOON.
25
               MR. FURR: I BELIEVE THE RESPONSE TO THE NEXT
QUESTION WILL TAKE MORE THAN TWO OR THREE MINUTES.
27
               THE COURT: WE BETTER BREAK FOR LUNCH. I DO
28 WANT TO GET IN A GOOD, LONG AFTERNOON THIS AFTERNOON WITH
4558
1
     THE JURY, PLEASE.
2
              LET'S TAKE A RECESS, JURORS, UNTIL 1:30.
PLEASE
3
     CONTINUE TO FOLLOW THE ADMONITION. WE'LL SEE YOU BACK AT
4
     1:30.
5
               (LUNCH RECESS TAKEN AT 11:58 A.M.)
6
7
8
9
10
11
12
13
14
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15
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21
22
23
24
25
26
27
28
4559
1
     AFTERNOON SESSION
                                                        1:35
P.M.
 2
     MONDAY, FEBRUARY 28, 2000
                THE COURT: GOOD AFTERNOON, EVERYBODY.
 3
 4
                WE ARE BACK ON THE RECORD AND READY TO GO, MR.
 5
   FURR.
 6
                MR. FURR: THANK YOU, YOUR HONOR.
 7
 8
                        DIRECT EXAMINATION (CONTINUED)
 9
                BY MR. FURR: Q. DR. WECKER, BEFORE WE BROKE
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10	FOR LUNCH, WE HAD BEGUN TALKING ABOUT THE MANNER IN WHICH
11	THE CPS-II STUDIES WAS CONDUCTED.
12	DO YOU RECALL THAT, SIR?
13	A. YES.
14	Q. AND I BELIEVE THAT YOU HAD ALREADY EXPLAINED TO
15	THE JURY THAT THE INFORMATION GATHERED FROM THE STUDY
16	SUBJECTS WAS GATHERED USING A QUESTIONNAIRE; IS THAT
17	CORRECT?
18	A. THAT'S RIGHT.
19	Q. AND WE HAD JUST GOT DONE MARKING THE FOUR-PAGE
20	I SHOULD SAY THE BLOWUP OF THE FOUR PAGES OF THE CPS-II
21	QUESTIONNAIRE; CORRECT?
22	A. YES.
23	Q. COULD YOU STEP DOWN AND USE THESE EXHIBITS TO
24	EXPLAIN TO THE JURY THE TYPE OF INFORMATION THAT WAS
25	GATHERED IN THE CPS STUDY.
26	A. YES.
27	MR. FURR: EXCUSE ME, DR. WECKER.
28	WITH THE COURT'S PERMISSION, MR. BROWN ASKED
THAT	
4560	
1	WE HOLD UP FOR A MINUTE, YOUR HONOR.
2	THE COURT: LET ME ASK, WAS THE FIRST NUMBER

6274? IS THAT THE FIRST ONE? MR. FURR: CORRECT, YOUR HONOR. 5 Q. OKAY. DR. WECKER, COULD YOU EXPLAIN TO US THE TYPES AND CATEGORIES OF INFORMATION THAT WERE OBTAINED ON THE CPS-II STUDY. 8 A. YES. THIS IS THE FIRST PAGE OF THE QUESTIONNAIRE FOR WOMEN. THERE IS ANOTHER QUESTIONNAIRE FOR MEN. 9 IT'S MOSTLY THE SAME, BUT THERE'S SOME SPECIFIC 10 11 QUESTIONS FOR WOMEN ON THIS ONE, SO I'LL USE THIS ONE AS AN 12 EXAMPLE. 13 WE ARE -- THERE WERE ABOUT A HALF A MILLION MEN 14 AND HALF A MILLION WOMEN FOR THE STUDY. YOU CAN SEE IT'S 15 THE AMERICAN CANCER SOCIETY'S CANCER PREVENTION STUDY NO. 2. THEY HAVE THE SHORT TERM CPS-II. ON THIS FIRST PAGE -- I'M NOT GOING TO GO THROUGH 18 ALL THE DETAILS, BUT JUST TO GIVE THE GENERAL IDEA, YOU SEE 19 THAT THEY START WITH FAMILY HISTORY KIND OF QUESTIONS, 20 BECAUSE THOSE ARE ISSUES THAT THE AMERICAN CANCER SOCIETY 21 SEES FIT TO STUDY WHEN THEY'RE STUDYING CANCER. 22 MR. BROWN: YOUR HONOR, I MOVE TO STRIKE THAT, 23 THE OPINION OF WHAT THE AMERICAN CANCER SOCIETY SEES FIT

TO 24 STUDY. 25 THE COURT: YES, I AM GOING STRIKE THAT 26 REFERENCE, WHAT THE AMERICAN SOCIETY SEE FITS TO DO. 27 JUST AS A HOUSEKEEPING MATTER, WHILE WE ARE ON 28 THIS, YOU MADE AN OBJECTION BEFORE WE HAD A RECESS ON 4561 1 HEARSAY. AND I'M NOT SURE WHETHER I SHOULD RULE ON THAT. 2 MR. BROWN: NO. I WITHDREW IT, YOUR HONOR. THE COURT: YOU WITHDREW IT. 3 4 GO AHEAD. 5 THE WITNESS: LET ME REPHRASE THAT. 6 THOSE ARE ITEMS THAT ARE ON THE AMERICAN CANCER 7 SOCIETY QUESTIONNAIRE. 8 THEN THERE'S ANOTHER SECTION HERE AT THE BOTTOM 9 HAVING TO DO WITH HISTORY OF DISEASES. AND I WILL JUST MOVE ON TO THE SECOND PAGE, 10 WHICH 11 IS THIS ONE (INDICATING). 12 MR. FURR: Q. DR. WECKER, COULD YOU TELL US THE NUMBER OF EACH EXHIBIT AS YOU GO THROUGH THEM, PLEASE. 13 14 A. THIS IS THE SECOND PAGE OF THE QUESTIONNAIRE, NO. 15 6275. 16 THIS IS THE SECTION AT THE TOP OF 6275, THE

17 SECOND PAGE OF QUESTIONNAIRE ABOUT EXERCISE. 18 AND THEY WANT -- THEY INQUIRE IN THE QUESTIONNAIRE WHETHER YOU GET NO EXERCISE AT ALL OR SLIGHT OR MODERATE OR HEAVY. THAT'S AN EASY QUESTION. JUST CHECK 21 THE BOX. AND THEN OTHER QUESTIONS ABOUT YOUR CURRENT 22 PHYSICAL CONDITION. 23 NEXT ARE QUESTIONS, SPECIAL QUESTIONS FOR THE FEMALES, BECAUSE THIS IS A FEMALE QUESTIONNAIRE. AND OVER 24 25 IN THE BOTTOM ON THE RIGHT, THIS IS THE SMOKING QUESTIONS, 26 UNDER "HABITS." YOU CAN SEE THEY'RE ASKING ABOUT SMOKING 27 HISTORY, AGE BEGAN AND SO ON. 28 Q. THIS IS THE NEXT ONE? 4562 A. THE THIRD PAGE IS EXHIBIT 6276. AND THEY 1 FINISH 2 UP THE SMOKING QUESTIONS. THEY GET INTO DIET QUESTIONS. AND THEY ARE QUESTIONS, VERY DETAILED QUESTIONS ON DIET, BRUSSELS SPROUTS AND LEAFY GREEN VEGETABLES AND 5 VERY DETAILED QUESTIONS. A SPECIAL SECTION ON FRIED FOODS, 6 AND SO ON WITH THE DIET QUESTIONS.

AND THEN VITAMINS AND MEDICATIONS THEY ASK

ABOUT	
8	OVER HERE.
9	AND THEN FINALLY, THE LAST PAGE, WHICH IS 6277,
10	THEY GET INTO OCCUPATIONAL EXPOSURES, LIKE TOXIC, GASOLINE
11	EXHAUST AND WOOD DUST, THAT SORT OF THING.
12	AND THEN THE LAST SECTION HERE IS KIND OF
THEY	
13	CALL IT "MISCELLANEOUS," BUT IT'S GOT SEVERAL DIFFERENT
14	THINGS IN HERE.
15	BUT THE MAIN THING IN HERE IS WHAT'S CALLED
16	SOCIAL SUPPORT QUESTIONS, LIKE: "HOW MANY FRIENDS OR
17	RELATIVES DO YOU FEEL CLOSE TO? ARE YOU MARRIED? DO YOU
GO	
18	TO CHURCH OR TEMPLE AND ATTEND CLUB MEETINGS?"
19	THIS IS A COLLECTION OF THINGS THAT ARE TERMED
IN	
20	THE LITERATURE AS SOCIAL SUPPORT QUESTIONS. AND IT'S A
21	RECOGNIZED RISK FACTOR, IF PEOPLE HAVE LOTS OF SOCIAL
22	SUPPORT, THEY HAVE BETTER HEALTH AND MORTALITY.
23	THAT'S THE END. SO THERE'S NEARLY 400 ITEMS OF
24	INFORMATION THAT ARE THEN PUT INTO A COMPUTER.
25	AND THAT'S THE DATABASE THAT I'M REFERRING TO
26	WHEN I TALKED ABOUT THE CPS-II DATABASE.
27	Q. WHY DON'T YOU TAKE THE STAND AT LEAST FOR A FEW
28	MINUTES.

4563 1 LET'S SEE IF I UNDERSTAND, DR. WECKER. I BELIEVE 2 YOU JUST TOLD US THAT MORE THAN 400 ITEMS OR PIECES OF 3 INFORMATION WAS OBTAINED FOR EACH INDIVIDUAL THAT FILLED OUT 4 THE QUESTIONNAIRE; IS THAT CORRECT? 5 YES, I THINK THAT'S -- I HOPE I HAVE GOT RECALL 6 ON THAT. IT'S ABOUT 400 TOTAL ITEMS OF INFORMATION, AND YOU 7 JUST SAW THEM. THOSE WERE ON THE ITEMS THAT WE JUST PUT ON 8 THE QUESTIONNAIRE.

9 Q. YOU TOLD US EARLIER THAT THIS WAS A QUESTIONNAIRE 10 ADMINISTERED TO AROUND A MILLION PEOPLE; IS THAT CORRECT? 11 A. MORE THAN A MILLION. 12 Q. SO YOU HAVE ABOUT 400 MILLION PIECES OF 13 INFORMATION COMING OUT OF THE STUDY; IS THAT CORRECT? 14 A. YES. WHEN YOU GET IT ON THE COMPUTER RECORDS, 15 IT'S OVER 400 MILLION ITEMS OF INFORMATION. Q. AND DOES YOUR CONSULTING COMPANY POSSESS THE 16 DATA 17 TAPES THAT CONTAIN ALL OF THE RESPONSES PROVIDED BY THE 1

MILLION STUDY SUBJECTS IN THE CPS-II? 18 19 A. YES, WE HAVE THOSE DATA TAPES. 20 Q. WHEN DID YOU OBTAIN THOSE DATA TAPES? 21 A. ABOUT 10 YEARS AGO. 22 Q. NOW, YOU TOLD US EARLIER THAT YOU HAVE 23 ANALYSES USING THOSE DATA TAPES; IS THAT CORRECT? A. YES. 25 Q. BY THE WAY, YOU WERE DEPOSED IN THIS CASE; IS 26 THAT CORRECT? 27 A. THAT'S CORRECT. Q. YOU WERE DEPOSED BY A LAWYER NAMED MR. WILNER; IS 4564 1 THAT RIGHT? A. YES. Q. AND IS IT ALSO TRUE THAT YOU HAVE PREVIOUSLY 4 PROVIDED COPIES OF THOSE DATA TAPES TO MR. WILNER AT HIS REQUEST SO THAT HE WOULD HAVE ACCESS TO THE DATA ALSO? A. THAT'S CORRECT. THE DATA TAPES AND THE DOCUMENTATION THAT COMES WITH THEM FROM THE AMERICAN 7 CANCER 8 SOCIETY. Q. WHAT DO YOU MEAN BY THE "DOCUMENTATION THAT 9 COMES

10 WITH THE DATA"?

17

- 11 A. WELL, THERE IS A GREAT THICK BOOK. FOR THOSE
- 12 FAMILIAR WITH COMPUTER DATABASES, IT HAS RECORD LAYOUTS,
- 13 VARIABLE NAMES, THE THINGS YOU NEED IN ORDER TO MAKE GOOD
- 14 USE OF THE COMPUTER DATABASE.
- 15 Q. IS THIS BOOK SORT OF A ROADMAP TO THE INFORMATION
- 16 CONTAINED ON THE DATA TAPES?
 - A. YES. IT'S LIKE A ROADMAP.
- Q. LET ME BACK UP. YOU TOLD US YOU GOT THE DATA
- 19 ABOUT 10 YEARS AGO. WHAT DID YOU DO FIRST WITH THE DATA
- 20 TAPE WHEN YOU RECEIVED IT 10 YEARS AGO?
- 21 A. WELL, THE FIRST THING I DID IS THE THING I ALWAYS
- 22 DO FIRST WHEN I GET A DATABASE. I CHECK IT FOR ACCURACY,
- 23 AND ANYTHING THAT MIGHT BE UNUSUAL, THAT NEEDS TO BE LOOKED
- 24 INTO. THERE ARE QUESTIONS IN HERE ABOUT YOUR HEIGHT AND
- 25 WEIGHT. AND SO I QUICKLY GO THROUGH AND FIND IF THERE'S
- 26 ANYBODY 20 FEET TALL, 700 POUNDS, SOMETHING THAT DOESN'T
- MAKE SENSE.
- 28 AND THAT'S EASY TO HAPPEN IN A DATABASE, BECAUSE

4565	
1	SOMEBODY HAD TO KEYPUNCH IN THE INFORMATION AND MAYBE THEY
2	MADE A MISTAKE. SO I CHECK ALL THE VARIABLES FOR
3	REASONABLENESS.
4	AND I ALSO CHECK FOR DUPLICATES. THAT'S,
AGAIN	
5	SOMETHING COMMON. WE HAVE ALL RECEIVED TWO CATALOGS FROM
6	THE SAME COMPANY. WE ARE IN THE DATABASE TWICE. SO I
CHECK	
7	FOR DUPLICATES.
8	AT THE END OF THAT, I BASICALLY DISCOVERED THIS
9	WAS A GOOD QUALITY DATABASE WITH ESSENTIALLY NO PROBLEMS.
10	Q. DID YOU ALSO USE THE DATA TO DETERMINE WHETHER
OR	
11	NOT YOU COULD REPLICATE THE RESULTS OF STUDIES THAT HAD
BEEN	
12	PUBLISHED ON THAT DATA SET?
13	A. YES. THAT WAS THE NEXT THING TO VERIFY, THAT
IT	
14	REPLICATED THE DATA I THOUGHT I HAD.
15	I WENT TO PUBLISHED ARTICLES THAT HAD USED THE
16	SAME DATA, MAINLY THE GOVERNMENT ARTICLES. AND THEN I
17	APPLIED THE SAME PROCEDURES AND MADE SURE I CAME OUT WITH
18	THE SAME ANSWER.
19	AND SURE ENOUGH, IT REPLICATES THE RESULTS OF
20	OTHERS AND THAT CAME ME CONSTRUCT THAT I HAVEN'T MADE A

MISTAKE HERE. I REALLY HAVE WHAT I THINK I HAVE, WHICH IS
THE AMERICAN CANCER SOCIETY DATA.

Q. YOU MENTIONED A MOMENT AGO ABOUT RECEIVING TWO
CATALOGS, HOW SOMETIMES THINGS ARE DUPLICATED.

DID YOU DETERMINE WHETHER OR NOT THERE WAS ANY
DUPLICATION WITHIN THE CPS-II DATA SET?
A. I FOUND ONE DUPLICATE. I INFORMED THE AMERICAN

4566

28

1 Q. OF THE MILLION PEOPLE THAT COMPLETED THE

CANCER SOCIETY ABOUT THAT AND THEY TOOK IT OUT.

- 2 QUESTIONNAIRE, AS YOU INDICATED, WHO ANSWERED APPROXIMATELY
- 3 400 QUESTIONS, DID ANY TWO OF THOSE MILLION PEOPLE COMPLETE
- 4 THE QUESTIONNAIRE IN EXACTLY THE SAME WAY?
- 5 A. NO. THAT WAS INTERESTING. EVEN LEAVING ASIDE
- 6 THE OBVIOUS THINGS, LIKE SOCIAL SECURITY NUMBER, THINGS THAT
- 7 WOULD BE UNIQUE, BUT JUST LOOKING AT THE SUBSTANTIVE
- 8 QUESTIONS LIKE DIET AND EXERCISE, THERE WERE NO -- NO TWO
- 9 PEOPLE OUT THE MILLION THAT HAD IDENTICAL BACKGROUNDS AND
- 10 HABITS IN TERMS OF FAMILY HISTORY OR DIET OR EXERCISE.
- 11 EVERYONE HAD THEIR OWN INDIVIDUAL CHOICES.
- 12 Q. EARLIER, I PUT UP PLAINTIFFS' EXHIBIT 1804, AND
- 13 WE LOOKED AT THE CHART THAT DR. DAVIS HAD USED THAT HAD

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THE
14
    CDC SMOKING ATTRIBUTABLE MORTALITY ESTIMATE OF 420,000
15 PEOPLE ON IT.
               DO YOU RECALL THAT?
16
17
           A. YES, I DO.
           Q. ARE YOU FAMILIAR WITH THE STATISTICAL
18
METHODOLOGY
19 THAT IS USED TO MAKE THAT CALCULATION?
20
           A.
                YES.
21
           Ο.
              HAVE YOU PREPARED A CHART THAT WOULD HELP YOU
22 EXPLAIN HOW THAT CALCULATION IS MADE TO THE JURY?
23
           A. YES, I HAVE.
24
                MR. FURR: WOULD YOU STEP DOWN AGAIN, PLEASE.
25
                LET ME ASK YOU TO USE CHART THAT WE MARKED AS
26
   6278, ENTITLED "ILLUSTRATION OF 'ATTRIBUTABLE' DEATHS
27 CALCULATION" TO EXPLAIN HOW THAT CALCULATION IS MADE.
                       (DOCUMENT MORE PARTICULARLY
4567
1
                       LISTED IN THE INDEX MARKED
2
                       FOR IDENTIFICATION DEFENDANTS'
3
                       EXHIBIT # 6278)
                THE WITNESS: OKAY. IT'S VERY EASY TO
EXPLAIN,
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BUT COMPLICATED TO DO IN PRACTICE, BECAUSE THERE IS A 6 MILLION THINGS TO DO. 7 SO I MADE A SIMPLE EXAMPLE WITH ONLY 100 8 NONSMOKERS AND 100 CURRENT SMOKERS. AND I'M GOING TO 9 ILLUSTRATE THE CALCULATION ON THIS SMALL ILLUSTRATION. THIS 10 IS NOT REAL DATA. THIS IS JUST TO SHOW HOW IT WORKS. 11 SO WE HAVE GOT 200 PEOPLE, AND WE HAVE GOT THEM 12 INTO TWO GROUPS, THE SMOKERS AND THE NONSMOKERS. 13 AND THEN WE WATCH FOR FOUR YEARS AND WE COME BACK 14 AND FOLLOW UP AND WE FIND OUT WHO DIED. 15 AND SUPPOSE THE RED DOTS THAT I HAVE COLORED IN 16 HERE ARE THE DEATHS. SO IN THE NEVER-SMOKER GROUP, 1, 2 3, 17 4 DEATHS. 18 AND IN THEN IN THE GROUP OF SMOKERS, THERE WERE 19 MORE DEATHS, 1, 2, 3, 4, 5, 6, 7, 8. SO THERE WERE MORE DEATHS AMONG THE SMOKERS. 20 AND THE ATTRIBUTABLE DEATHS CALCULATION IS 21 22 NOTHING MORE THAN HOW MANY EXTRA DEATHS THERE ARE IN THE 23 SMOKING POPULATION. THERE WERE EIGHT OVER HERE IN THE 24 SMOKERS, FOUR IN THE NONSMOKERS (INDICATING). EIGHT MINUS FOUR IS FOUR. FOUR EXTRA ONES OVER HERE AND THAT'S IT. 25 26 THE 400 MILLION CALCULATION IS NOTHING MORE. 27 IT'S A CORE ON JUST THAT CALCULATION.

4568

- 1 STUDY SUBJECTS PARTICIPATING INSTEAD OF 200, IS YOUR FORMULA
- 2 THAT YOU USE, INSTEAD OF ATTEMPTING TO CALCULATE -- EXCUSE
- 3 ME -- COUNT THE DOTS BY HAND --
- 4 A. OF COURSE. THE DOTS WERE TO HELP EXPLAIN
- 5 THINGS. THE COMPUTER DOESN'T KNOW HOW TO LOOK AT DOTS.

SO

- 6 THERE'S A BIT OF ARITHMETIC IN THE FORM OF A FORMULA THAT
- 7 THE COMPUTER KNOWS. AND WHEN THE COMPUTER APPLIES THE
- 8 FORMULA -- THIS IS AN IMPORTANT POINT -- IT GETS EXACTLY

9 WHAT WE GET, FOUR.

- 10 IT ISN'T A DIFFERENT ANSWER. IT'S ALWAYS GOING
- 11 TO BE THE SAME AS I JUST SHOWED IT. JUST, OF COURSE, IT
- 12 DOESN'T COUNT DOTS. IT USES A FORMULA.
- MR. FURR: LET ME ASK YOU TO USE WHAT WE

MARKED

- 14 AS DEFENDANTS' EXHIBIT 6279.
- 15 (DOCUMENT MORE PARTICULARLY 16 LISTED IN THE INDEX MARKED
- 17 FOR IDENTIFICATION DEFENDANTS'
- 18 EXHIBIT # 6279)

19	MR. FURR: Q. I ASK YOU TO EXPLAIN TO THE
JURY	
20	THE FORMULA THAT IS USED TO CALCULATE ATTRIBUTABLE DEATHS
21	MORTALITY FROM THE CPS-II.
22	THE COURT: WHAT IS THE TITLE OF 6279?
23	MR. FURR: IT'S ALSO TITLED "ILLUSTRATION OF
24	'ATTRIBUTABLE' DEATHS CALCULATION," BUT THIS IS THE CHART
25	THAT HAS THE FORMULA ON THE BOTTOM.
26	THE COURT: OKAY.
27	THE WITNESS: OKAY. THIS SAME CHART, WHERE WE
28	WERE EASILY ABLE TO COUNT THAT, THERE WERE FOUR EXTRA
DEATH	IS .
4= 60	
4569	
1	IN THE SMOKER GROUP.
2	I'M NOT GOING TO DO THE SAME CALCULATIONS THE
WAY	
3	THE COMPUTER DOES DO IT. WHAT THE COMPUTER DOES IS FIRST
4	CALCULATE UP THE PERCENT OF THE DEATH RATE. THERE'S FOUR
5	OUT OF 100 IN THE NONSMOKER GROUP. THAT'S 4 PERCENT.
6	AND THEN IT WILL CALCULATE THE PERCENT OF THE
7 8	DEATH RATE IN THE SMOKER GROUP, AND IT GETS 8 PERCENT.
_	AND THEN, IN A WAY THAT SEEMS MORE COMPLICATED
9	THAN NECESSARY, BECAUSE AS HUMAN BEINGS WE CAN COUNT THE
10	•
11	RATHER LONG ARITHMETIC. IT TAKES THE DEATH RATE, 8

PERCENT,

- 12 AND DIVIDES IT BY THE 4 PERCENT. THAT'S CALLED A RELATIVE
- 13 RISK, A RELATIVE RISK OF TWO. 8 PERCENT IS TWICE AS BIG
- AS
- 4 PERCENT THAT GOES IN HERE, WHERE IT'S WRITTEN RELATIVE
- 15 RISK, TWO.
- 16 THEN IT FIGURES OUT HOW MANY SMOKERS THERE ARE
- 17 COMPARED TO THE TOTAL. IN THIS CASE, I HAVE GOT 100 SMOKERS
- 18 OUT OF 200 TOTAL PEOPLE. SO IT PUTS 100 DIVIDED BY 200.
- 19 THAT'S THE SMOKING PROPORTION, SOMETIMES CALLED THE
- 20 PREVALENCY OF SMOKING. BUT IN EVERYDAY LANGUAGE, IT'S JUST
- 21 THE PROPORTION OF SMOKERS.
- 22 AND THEN IT COUNTS UP THE TOTAL NUMBER OF DEATHS
- 23 IN SMOKERS AND NONSMOKERS COMBINED. THERE WERE 12 TOTAL,
- 24 FOUR OVER HERE AND EIGHT OVER HERE. AND IT PUTS THE
- NUMBER
- 25 12 HERE.
- 26 IT GOES THROUGH THIS COMPLICATED ARITHMETIC
- THAT
- 27 SEEMS, I MUST ADMIT, ON ITS FACE TO SEEM LIKE MORE THAN IS
- 28 NECESSARY, BUT THE COMPUTER CAN DO THIS KIND OF WORK VERY

4570 1 FAST. SO THAT'S THE WAY WE DO IT. 2 AND SURE ENOUGH, IT DOES ALL THAT ARITHMETIC, AND 3 IT GETS A FOUR, EXACTLY THE SAME AS IF YOU COUNTED THEM BY 4 5 OKAY. I WANT TO MAKE SURE WE ALL UNDERSTAND б SOMETHING. 7 THIS ATTRIBUTABLE DEATHS CALCULATION IS A 8 STATISTICAL CALCULATION, ISN'T IT? 9 A. YES, IT'S A STATISTICAL FORMULA. 10 Q. AND THIS IS THE FORMULA THAT THE CDC AND OTHERS 11 HAVE USED TO CALCULATE SMOKING-ATTRIBUTABLE MORTALITY; IS 12 THAT CORRECT? 13 A. FOR SMOKING-ATTRIBUTABLE MORTALITY AND OTHER 14 KINDS OF MORTALITY. IT'S USED FOR VARIOUS RISK FACTORS, 15 INCLUDING SMOKING. 16 HAVE A SEAT AGAIN, PLEASE. 17 WHEN THE CDC CALCULATED SMOKING-ATTRIBUTABLE 18 MORTALITY, DID THE CDC ACTUALLY GO OUT AND REVIEW AUTOPSY 19 REPORTS OR DEATH CERTIFICATES RELATED TO THE STUDY SUBJECTS? A. NO, NOT AT ALL. 20 21 THEY SIMPLY APPLIED THE FORMULA THAT I SHOWED, 22 WHICH HAS THE RESULT OF TELLING US HOW MANY MORE DEATHS

THERE ARE IN THE SMOKING POPULATION WHEN COMPARED TO THE 23 NONSMOKING POPULATION. 25 Q. WHEN THE CDC CALCULATED THIS SMOKING-ATTRIBUTABLE 26 MORTALITY ESTIMATE, DID THE CDC ACTUALLY GO OUT AND REVIEW MEDICAL RECORDS AND TALK TO THE DOCTORS OF THE PARTICIPANTS OF THE STUDY THAT HAD DIED IN THE INTERVENING FOUR YEARS? 4571 1 NO. IT'S JUST BASED ON THE QUESTIONNAIRE 2 RESULTS, ON THE FOLLOW-UP, AND THE FORMULA. Q. LET ME ASK YOU ABOUT THIS FORMULA THAT YOU JUST 3 4 SHOWED US. 5 DO YOU KNOW WHO INVENTED THAT FORMULA? 6 A. YES. 7 Q. AND WHO IS THAT? A. HIS NAME WAS MORTON LEVIN. HE PUBLISHED AN 9 ARTICLE IN 1953 WHERE HE DEVELOPED THAT FORMULA. 10 THE COURT: COULD I SEE WHAT YOU JUST SHOWED THE

MR. FURR: YES. IT WAS THE LAST CHART, YOUR

11

12

13

JURY?

HONOR, 6279.

14 CHART	THE COURT: OKAY. I THOUGHT IT WAS A NEW
15	MR. FURR: O. AND THAT FORMULA WAS DEVELOPED
16	BY A MAN NAMED LEVIN?
17	A. YES.
18	Q. (WRITING ON BOARD)
19	
20	WHEN WAS IT PUBLISHED? A. 1953.
21	Q. HAVE YOU REVIEWED MR. LEVIN'S PUBLICATIONS
22	RELATED TO THE DEVELOPMENT OF THAT FORMULA?
23	A. YES. I'VE GOT IT HERE, IF YOU WANT.
24	Q. YOU'VE GOT IT HERE WITH YOU. MR. BROWN MAY
WANT	
25	TO ASK YOU SOME QUESTIONS ABOUT IT, SO KEEP IT UP THERE.
26	IS THERE ANYTHING INHERENTLY WRONG WITH
27	INACCURATE FROM A STATISTICAL PERSPECTIVE IN USING THE
28	FORMULA DEVELOPED BY MR. LEVIN TO CALCULATE
4572	
1	SMOKING-ATTRIBUTABLE MORTALITY?
2	A. WELL, THAT'S A MORE COMPLICATED QUESTION THAN
YOU	
3	MAY REALIZE. SO LET ME SPEAK TO THE FIRST PART OF YOUR
4	QUESTION ABOUT ANYTHING WRONG WITH THE FORMULA, THAT PART.
5	Q. OKAY.
6	A. AND THEN, IF YOU COULD ASK MAYBE ANOTHER

OUESTION 7 ABOUT THE USE OF THE FORMULA, BECAUSE IT'S -- THERE'S A 8 DISTINCTION THAT'S IMPORTANT. 9 AS TO THE CORRECTNESS OF THE FORMULA, THERE IS 10 NOTHING WRONG WITH THE FORMULA. IT'S A PERFECTLY GOOD 11 FORMULA. OKAY? 12 BUT JUST LIKE ANY FORMULA, IT CAN BE MISUSED. 13 AND SO YOU COULD MAKE A PERFECTLY CORRECT FORMULA, USE IT 14 IMPROPERLY AND GET A WRONG ANSWER. 15 BUT YOU CAN'T BLAME THIS ON THE FORMULA. YOU 16 HAVE TO BLAME THAT ON YOURSELF, FOR USING IT IN A WAY YOU 17 SHOULDN'T. 18 Q. ARE THERE CONDITIONS UNDER WHICH IT WOULD BE INAPPROPRIATE TO USE THE LEVIN FORMULA TO CALCULATE -- TO 19 20 MAKE ATTRIBUTABLE MORTALITY CALCULATIONS? 21 MR. BROWN: OBJECTION. FOUNDATION AND 22 QUALIFICATION. THE COURT: ARE YOU GIVING THIS ANSWER FROM A 23 24 STATISTICAL AS OPPOSED TO ANY KIND OF A MEDICAL JUDGMENT OR 25 CONCLUSION?

- 26
- THE WITNESS: A STATISTICAL PERSPECTIVE, YOUR
- 27 HONOR, EXCLUSIVELY.
- 28 THE COURT: I'M GOING TO ALLOW THE ANSWER,

4573 1 THE WITNESS: YES. THERE ARE LIMITATIONS ON THE 2 PROPER USE OF THE FORMULA. 3 AND THEY'RE DISCUSSED BY LEVIN IN THE SAME 4 ARTICLE WHERE HE FIRST WROTE DOWN THE FORMULA. 5 MR. FURR: Q. AND HAS THE SURGEON GENERAL ALSO 6 DISCUSSED LIMITATIONS UPON THE USE OF THE LEVIN FORMULA TO 7 MAKE ATTRIBUTABLE MORTALITY CALCULATIONS? 8 MR. BROWN: OBJECTION. HEARSAY. 9 THE COURT: SUSTAINED. 10 MR. FURR: Q. HAVE YOU REVIEWED THE 1996 11 SURGEON GENERAL'S REPORT? 12 A. YES. THAT'S THE ONE ON EXERCISE. MR. BROWN: I'M SORRY. I COULDN'T HEAR THE 13 14 YEAR. 15 MR. FURR: 1996. 16 Q. AND IS YOUR OPINION ABOUT THE CONDITIONS UNDER WHICH THE LEVIN FORMULA CAN BE USED APPROPRIATELY TO MAKE 17 18 ATTRIBUTABLE MORTALITY CALCULATIONS BASED, IN PART, ON THE 1996 SURGEON GENERAL'S REPORT? 19 20 MR. BROWN: SAME OBJECTION. 21 THE COURT: NO, HE IS NOT ASKING HIM THE

THEN.

22 CONTENT. HE IS JUST SAYING -- HE'S JUST ASKING HIM IF HE 23 BASES IT, IN PART, ON THAT REPORT. 24 HE'S NOT ASKING HIM FOR THE SUBSTANCE OF THE 25 REPORT. HE'S ASKING HIM FOR WHETHER HE RELIES ON THAT 26 REPORT. 27 AN EXPERT WITNESS IS ALLOWED TO STATE THE BASIS 28 FOR HIS OPINION WITHOUT GIVING YOU, ON DIRECT EXAMINATION, 4574 1 THE CONTENT. 2 THAT'S ALL HE'S ASKING. I'M GOING TO OVERRULE. 3 THE WITNESS: YES. THAT'S ONE OF THE BASES THAT 4 I HAVE REVIEWED. 5 THE COURT: DON'T TELL US THE CONTENT. YOU CAN 6 TELL US, IN GENERAL, WHAT SUBJECT IS CONSIDERED, BUT DON'T TELL US THE CONTENT OF ANYTHING IN IT ON THIS QUESTION, 7 8 PLEASE. 9 THE WITNESS: I HOPE I UNDERSTAND. 10 THE COURT: I DIDN'T SAY THAT YOU WERE GOING TO, 11 BUT I DIDN'T KNOW WHETHER YOU KNEW WHAT THE LIMITATIONS WERE 12 HERE. 13 THE WITNESS: I'M NOT SURE I DO, BUT I'LL TRY

MY 14 BEST. 15 THE COURT: OKAY. 16 THE WITNESS: THE SURGEON GENERAL REPORT ON 17 PHYSICAL ACTIVITY AND HEALTH THAT I HAVE WITH ME DISCUSSES 18 THE LIMITATIONS ON THE USE OF THIS FORMULA --19 MR. BROWN: OBJECTION. MOVE TO STRIKE. 20 HEARSAY. 21 THE WITNESS: -- THAT I MENTIONED. 22 MR. BROWN: I DON'T THINK THE WITNESS 23 UNDERSTANDS. 24 MR. FURR: MAY I BE HEARD? 25 THE COURT: GO AHEAD. 26 MR. FURR: I THINK THE WITNESS DID STAY WITHIN 27 THE BOUNDS OF YOUR HONOR'S RULING. 28 THE COURT: I THINK SO. I'M GOING TO LEAVE IT 4575 1 IN THE RECORD. 2 YOU CAN CROSS ON IT, IF YOU WANT, MR. BROWN. I 3 THINK THAT THAT DIDN'T GET INTO THE CONTENT OF IT. MR. FURR: Q. OKAY, DR. WECKER. BASED UPON THE WORK OF MR. LEVIN, THE SURGEON GENERAL, AND YOUR 4 5 6 EXPERIENCE, TRAINING, EDUCATION AS A STATISTICIAN, DO YOU

HAVE AN OPINION WITH RESPECT TO THE CONDITIONS UNDER WHICH 8 IT IS PROPER TO USE THE LEVIN FORMULA TO MAKE ATTRIBUTABLE 9 MORTALITY CALCULATIONS? 10 YES. 11 MR. BROWN: OBJECTION. QUALIFICATIONS, 12 FOUNDATION, 352. AND I THINK IT CALLS FOR A MEDICAL 13 OPINION. 14 THE COURT: I'M GOING TO OVERRULE ALL OF THAT, AND I HAVE DONE THE 352 WEIGHING. 15 16 BUT IT'S WITHOUT PREJUDICE TO YOUR MOVING TO 17 STRIKE THE ANSWER. LET'S WAIT AND SEE WHAT THE ANSWER IS. I DON'T 18 19 THINK IT NECESSARILY CALLS FOR A MEDICAL OPINION. AND I 20 THINK THIS WITNESS HAS MADE IT CLEAR THAT HE HAS NO CLAIMS 21 TO EXPERT STATUS IN MEDICAL MATTERS AND THAT HE WON'T BE 22 GIVING US ANY MEDICAL OPINIONS. 23 SO HAVING HEARD ALL OF THAT, I'M GOING TO LET MIH 24 ANSWER THIS QUESTION. 25 THE WITNESS: I'M NOT SURE I UNDERSTAND. BELIEVE YOU'RE ASKING ME IF I HAVE AN OPINION OR IF I KNOW 26 27 WHAT THE CONDITIONS ARE THAT ARE NECESSARY FOR THE PROPER 28 APPLICATION OF THE LEVIN FORMULA. 4576 1 MR. FURR: Q. THAT'S CORRECT.

- 3 Q. CAN YOU EXPLAIN TO THE JURY WHAT THOSE CONDITIONS
- 4 ARE.
- 5 A. YES. THE CONDITIONS ARE THAT, WHEN YOU COMPARE
- 6 TWO GROUPS WITH THE LEVIN FORMULA, THAT THERE CAN BE NO
- 7 OTHER DIFFERENCES BETWEEN THE TWO GROUPS OTHER THAN THE
- ONE
- 8 DIFFERENCE WHICH DEFINES THE TWO GROUPS YOU'RE COMPARING,
- 9 SMOKERS AND NONSMOKERS.
- 10 IT HAS TO BE THE CASE, TO GET A CORRECT RESULT
- 11 FROM THE LEVIN FORMULA, THAT WHEN IT COMES TO DIET OR
- 12 EXERCISE OR TOXIC EXPOSURE OR ANY ONE OF A NUMBER OF RISK
- 13 FACTORS, THAT THEY HAVE TO BE EVENLY SPREAD IN THE TWO
- 13 FACTORS, ITAL ITEL TAVE TO BE EVENUL SPREAD IN THE TWO
- 14 GROUPS.
- 15 IF THAT'S NOT TRUE -- LET'S SAY THERE'S A LOT
- 16 MORE RISK FACTORS AMONG THE SMOKERS, THEN YOU ARE NOT
- 17 LOOKING AT JUST THE SMOKING PHONOMENON ANYMORE. YOU MAY
- BE
- 18 LABELED SMOKERS, BUT YOU'RE LOOKING AT THE EFFECT OF SMOKING
- 19 AND DIET AND EXERCISE AND A BUNCH OF OTHER THINGS.
- 20 AND SO THE LEVIN FORMULA OVERSTATES IN THAT
- 21 CASE. IT'S OFF.

- Q. HOW DOES THIS CONDITION THAT YOU JUST DESCRIBED
- Q. HOW DOES THIS CONDITION THAT TO USE THE LEVIN FOR US UNDER WHICH IT'S APPROPRIATE TO USE THE LEVIN
- 24 RELATE TO THE STATISTICAL PRINCIPLE OF CONFOUNDING THAT YOU
- 25 EXPLAINED TO US EARLIER?
- 26 A. CONFOUNDING SHOWS UP IN A LOT OF DIFFERENT WAYS
- 27 WHEN DOING STATISTICAL ESTIMATES, AND MANY OTHER KINDS OF
- 28 ESTIMATES OTHER THAN THE LEVIN FORMULA.

4577

- THIS IS A MANIFESTATION OF CONFOUNDING WITH THE 1
- 2 LEVIN FORMULA. IT'S THE MIXING TOGETHER OF EFFECTS FROM
- 3 DIFFERENT SOURCES.
- SO ONE CAN NO LONGER SAY THAT THE OBSERVED EFFECT
- 5 IS DUE TO ONE THING ONLY.
- 6 Q. AND DR. WECKER, HAVE YOU ANALYZED THE CPS-II DATA
- 7 SET TO DETERMINE WHETHER OR NOT THOSE DATA SATISFY THE
- CONDITION FOR THE PROPER USE OF THE LEVIN FORMULA? 8
- A. I HAVE DONE THAT ANALYSIS. 9
- 10 Q. LET ME ASK YOU FIRST TO EXPLAIN TO US THE MANNER
- 11 IN WHICH YOU CONDUCTED THE ANALYSIS.
- 12 A. WHAT I DID WAS TAKE THE ENTIRE DATA SET, A

13 14	MILLION QUESTIONNAIRES, AND I COMPARED SMOKERS AGAINST NONSMOKERS IN TERMS OF OTHER RISK FACTORS RECOGNIZED IN
THE 15	LITERATURE AND RECORDED IN THE SURVEY.
16	AND I JUST WENT THROUGH THESE VARIOUS RISK
17 18 OF	FACTORS, AND FOUND OUT WHETHER THEY ARE EVENLY SPREAD BETWEEN THE TWO GROUPS OR WHETHER MAYBE SMOKERS HAVE MORE
19	THE RISK FACTORS OR LESS.
20 UPON	Q. OKAY. THE FIRST ANALYSIS YOU DID WAS BASED
21	RISK FACTORS REPORTED IN THE SCIENTIFIC LITERATURE; IS
THAT 22	CORRECT?
23	A. I THINK I'M CONFUSED BY THAT. YOU SAY "THE
24 25	FIRST ANALYSIS." THE ANALYIS WE ARE TALKING ABOUT. THERE AREN'T
26	TWO HERE.
27 28	Q. THAT'S A BAD QUESTION. LET ME TRY AGAIN. DID YOU ANALYZE THE CPS-II DATA SET ITSELF TO
4578 1 2	DETERMINE WHAT FACTORS WERE ASSOCIATED WITH INCREASED MORTALITY WITHIN THE DATA SET?

3	A. YES, I ALSO DID THAT.
4	FOR EACH OF THE RISK FACTORS THAT I LOOKED
INTO,	
5	NOT ONLY DID I LOOK AT THE LITERATURE TO NOTE THAT THERE
ARE	
6	RECOGNIZED RISK FACTORS THAT WERE ALSO ASKED ABOUT ON THE
7	QUESTIONNAIRE, BECAUSE I HAVE TO HAVE THE DATA, BUT I
8	DOUBLE-CHECKED MYSELF THAT THEY INDEED WERE RISK FACTORS,
9	BECAUSE CALCULATING RISK FACTOR IS A STATISTICAL THING,
NOT	
10	A MEDICAL THING.
11	IT'S STATISTICIANS WHO TEACH MEDICAL DOCTORS
WHAT	
12	A RISK FACTOR IS, NOT THE OTHER WAY AROUND.
13	AND SO I CALCULATED ALL THOSE RISK FACTORS, AND
I	
14	VERIFIED THAT ALL THE ONES THAT ARE GOING TO APPEAR ON THE
15	CHARTS WE HAVE COMING UP WERE INDEED RISK FACTORS FOR
16	MORTALITY.
17	Q. AND DID YOU, IN FACT, FIND DIFFERENCES IN
18	MORTALITY RISK FACTORS BETWEEN SMOKERS AND NONSMOKERS
OTHER	
19	THAN SMOKING?
20	A. OH, YES. LOTS OF THEM.
21	MR. FURR: LET ME ASK YOU TO STEP DOWN AND USE
22	THE CHARTS THAT WE ARE GOING TO MARK AS 6280 AND 6281 TO

23 24	EXPLAIN TO THE JURY THE FACTORS FOR WHICH YOU COMPARED SMOKERS AND NONSMOKERS.
25	(DOCUMENTS MORE PARTICULARLY
26	LISTED IN THE INDEX MARKED
27	FOR IDENTIFICATION DEFENDANTS'
28	EXHIBITS # 6280 AND 6281)
4579	
1	THE COURT: AND AFTER YOU PUT THE STICKER ON,
2	COULD YOU JUST TURN THEM IN MY DIRECTION SO I SEE WHAT
THEY	COOLD TOO COST TORN THEM IN MI DIRECTION SO I SEE WHAT
3	ARE.
4	MR. FURR: THAT'S 6280 I'M NOT SURE HOW WE
5	ARE GOING TO DO THIS AND 6281.
6	THE COURT: OKAY.
7	Q. DR. WECKER, USING 6280 AND 81, WOULD YOU
EXPLA	IN
8	TO US THE FACTORS THAT YOU USED TO COMPARE SMOKERS AND
9	NONSMOKERS AND WHY YOU USED THOSE FACTORS.
10	A. OKAY. LET ME START WITH 6280. THE FIRST ITEM
IS	
11	THE RISK FACTOR OF "LITTLE OR NO EXERCISE."
12	I THINK IT WILL BE HELPFUL IF I GO TO THE
13	OUESTIONNAIRE, JUST TO MAKE CONTACT WITH THE SOURCE DATA.
	~

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14
     THE SECOND PAGE OF THE QUESTIONNAIRE, THE TOP LEFT.
15
           Q. INDICATE THE EXHIBIT NUMBER AS YOU GO.
           A. YES. JUST TO BE SURE I'M CLEAR, I WILL SHOW
16
6275
17 (INDICATING). AND THAT'S THE SECOND PAGE OF THE
    QUESTIONNAIRE.
18
19
               MR. BROWN: I HAVE NO IDEA WHAT HE'S REFERRING
20
    TO.
21
               THE WITNESS: 6275.
               MR. BROWN: I DON'T KNOW WHAT THOSE NUMBERS
22
23 ARE. I'VE NEVER BEEN SHOWN THOSE. OKAY.
               THE COURT: THOSE HAVE ALREADY BEEN MARKED
24
HERE
25 IN OPEN COURT.
              MR. FURR: THESE ARE THE EXHIBITS WE MARKED IN
26
OPEN COURT AS WE PROCEEDED THROUGH THE EXAMINATION.
28
               THE COURT: OKAY.
4580
               THE WITNESS: OKAY.
1
               MR. BROWN: IF THERE WAS JUST A SECOND BETWEEN
     THE NUMBER AND MY BEING ABLE TO EVEN SEE IT, THAT WOULD BE
3
     ALL RIGHT.
 5
               THE WITNESS: I WAS HOPING TO BRING SOME
 6 CLARITY. I'M NOT SURE IF I'VE SUCCEEDED HERE.
               I HAVE GOT THESE CHARTS, 6280 AND 6281. AND I
```

8 WANTED TO SHOW, BEFORE I EXPLAIN THOSE TWO CHARTS, THAT THEY 9 HAVE A CONNECTION TO THE QUESTIONNAIRE. 10 AND THE FIRST QUESTION ON 6280, THE FIRST ISSUE 11 IS "LITTLE OR NO EXERCISE," AND THEN THERE'S A BUNCH MORE RISK FACTORS THAT I'LL NOT SPEND AS MUCH TIME ON. 12 13 "LITTLE OR NO EXERCISE" COMES FROM THE SECOND 14 PAGE OF THE QUESTIONNAIRE, WHERE IT SAYS AT THE TOP: "HOW 15 MUCH EXERCISE DO YOU GET?" 16 AND IF YOU CHECK "NONE" OR "SLIGHT," RATHER THAN 17 CHECK "MODERATE" OR "NEVER," "NONE" OR "SLIGHT," I CALL THAT 18 "LITTLE OR NO EXERCISE." I COULD HAVE CALLED IT "NONE" OR 19 "SLIGHT," BUT "LITTLE OR NO" SEEMED TO MAKE SENSE. 20 AND THEN I LOOKED AT THE COLLECTION OF SMOKERS TO 21 FIND OUT WHAT PERCENT OF THEM GOT LITTLE OR NO EXERCISE, BECAUSE THAT'S A RISK FACTOR. WE SHOULD DO OUR EXERCISES. 23 AND THEN I LOOKED AT THE PERCENTAGES OF 24 NONSMOKERS. I LOOKED AT SMOKERS AND NONSMOKERS. I LOOKED 25 AT THE PERCENTAGE OF EACH GROUP THAT IS GETTING THE RISK 26 FACTOR, WHICH IS THE COUCH POTATO, "LITTLE OR NO EXERCISE."

27 AND THEN I DETERMINED, BY JUST COMPARING WHICH OF 28 THE TWO GROUPS HAD THE MOST OF THAT RISK FACTOR. IF I HAD Α 4581 1 MARKER AND WERE ALLOWED TO DO SO, JUST TO KEEP IT STRAIGHT, I'D PUT A LITTLE CHECK IN THE BOX HERE UNDER "SMOKERS," BECAUSE IT TURNED OUT THAT IT'S SMOKERS THAT HAVE LESS 4 EXERCISE, AND THEREFORE MORE OF THAT RISK FACTOR. 5 Q. OKAY. 6 A. NOW THAT WE HAVE SEEN THAT ONE, I'LL JUST 7 CONTINUE WITH THE OTHERS. 8 Q. WHY DON'T YOU USE ONE MORE TO EXPLAIN TO US HOW 9 YOU CONTINUED MAKING THESE ANALYSES BETWEEN SMOKERS AND 10 NONSMOKERS. 11 A. WELL, YOU MEAN WITH THE QUESTIONNAIRE? 12 Q. YES. 13 A. I COULD DO THE FRIED FOODS. SHOW IT TO MR. BROWN, IF YOU WOULD, PLEASE. 14 Q. A. LOOKING AT 6276, I WILL TAKE THE TOP ONE OFF OF 15 16 THIS OTHER CHART, EATING MORE FRIED FOODS. 17 THESE ARE THE -- CHART 6281 IS THE EATING AND 18 DRINKING CHOICES. AND SO I CAN FIND OUT WHICH GROUP, 19 SMOKERS OR NONSMOKERS, EAT MORE FRIED FOODS BY JUST

LOOKING 20 AT THE QUESTIONNAIRE, CALCULATING A PERCENTAGE THAT HAS A 21 HIGHER PROPORTION OF THESE FRIED FOODS THAT ARE DOWN HERE IN 22 QUESTION 2. 23 IF THEY CHECKED "DO NOT EAT FRIED FOODS," THEN 24 THEY ARE DEFINITELY NOT -- OR IF THEY CHECKED "A LOT OF 25 FRIED FOODS," THEN I COMPARE THEM IN HOW MUCH THEY CHECK. 26 AND I SEE WHICH DOES MORE. 27 AND THE RESULT WAS, AGAIN, SMOKERS, HAVING 28 REPORTED ON THEIR QUESTIONNAIRES THAT THEY EAT MORE FRIED 4582 1 FOODS THAN NONSMOKERS, THAT'S A RISK FACTOR. FRIED FOODS 2 ARE A RISK FACTOR.

- 3 IF I WERE MAKING CHECK MARKS, I WOULD PUT A
- CHECK MARK IN THE "SMOKER" BOX.
- 5 OKAY. LET ME ASK A COUPLE OF QUESTIONS.
- 6 EACH OF THESE FACTORS THAT YOU LISTED AS A
- 7 LIFESTYLE FACTOR, THAT IS A FACTOR THAT HAS BEEN REPORTED IN
- 8 THE SCIENTIFIC LITERATURE AND VERIFIED BY YOU IN THE CPS-II
- DATA TO BE A STATISTICAL RISK FACTOR FOR DYING YOUNGER; IS 9 10 THAT CORRECT?

11	A. FOR DYING.
12	Q. FOR DYING?
13	A. IF YOU LOOK, LIKE, SAY AT A FOUR-YEAR PERIOD,
AND	
14	THE GROUP THAT HAS A RISK FACTOR, IT HAS A HIGHER DEATH
15	RATE.
16	
	Q. AND YOU COMPARED THE PERCENTAGE OF SMOKERS
VERSU	
17	THE PERCENTAGE OF NONSMOKERS IN THE CPS-II DATA ON THE
BASIS	
18	OF EACH OF THESE FACTORS; IS THAT CORRECT?
19	A. YES.
20	Q. OKAY. YOU BROUGHT WITH YOU TWO CHARTS THAT
21	DEMONSTRATE THE GROUP WHICH YOU FOUND TO HAVE THE HIGHER
22	PERCENTAGE FOR LIKELIHOOD OF HAVING THE RISK FACTOR
23	THAT'S BEING LOOKED AT; IS THAT CORRECT?
24	A. YES.
25	MR. FURR: LET ME ASK YOU TO LOOK AT WHAT
WE'VE	
26	MARKED AS 6282 AND 6283.
27	(DOCUMENTS MORE PARTICULARLY
28	LISTED IN THE INDEX MARKED
4583	

1 FOR IDENTIFICATION DEFENDANTS' 2 EXHIBIT # 6282 AND 6283) 3 MR. FURR: YOUR HONOR, THE NEXT TWO CHARTS ARE TITLED "LIFESTYLE FACTORS" WITH CHECKS IN BOXES. 5 THE COURT: I UNDERSTAND. 6 MR. FURR: O. AND I ASK YOU TO EXPLAIN WHAT 7 YOU FOUND WHEN YOU ANALYZED THE CPS-II DATABASE. 8 A. WELL, WITH RESPECT TO THE FIRST CHART, WHICH IS 6282, I FOUND THAT FOR EVERY ONE OF THESE RISK FACTORS, 9 10 EXERCISE, TOXIC EXPOSURES, AND THEN THESE MEASURES OF SOCIAL 11 SUPPORT, WHICH I DISCUSSED EARLIER, HAVING FRIENDS --12 ACTUALLY, THE RISK FACTOR IS NOT HAVING FRIENDS, BEING NOT 13 MARRIED. THAT'S A RISK FACTOR -- FOR EVERY ONE OF THOSE, 14 THE SMOKERS HAD MORE OF THE RISK FACTORS, EVERY ONE. 15 AND THEN ON CHART 6283, WHERE THE "EATING AND 16 DRINKING RISK FACTORS" WERE, FOR FRIED FOODS AND HIGH FAT 17 FOODS, AND MOST ALL OF THE OTHERS EXCEPT TWO, AGAIN, THE 18 SMOKERS HAD MORE OF THE RISK FACTOR, TAKING LESS VITAMINS, Α 19 RISK FACTOR, JUST TO PICK ONE EXAMPLE. 20 BUT THERE WERE TWO EXCEPTIONS. IT WAS THE 21 NONSMOKERS THAT ATE MORE DESSERT AND MORE BUTTER AND 22 MARGARINE. 23 Q. OKAY. THE JURY HAS ALSO HEARD THE TERM 24 "STATISTICAL SIGNIFICANCE" DURING THE COURSE OF THE TRIAL.

25 THAT'S A STATISTICAL PRINCIPLE, ISN'T IT, DR. WECKER? 27 A. YES. Q. WOULD YOU EXPLAIN TO THE JURY WHAT "STATISTICAL 28 4584 1 SIGNIFICANCE" MEANS. 2 A. "STATISTICAL SIGNIFICANCE" IS A TERM IN A SET OF 3 PROCEDURES DEVISED BY STATISTICIANS TO DISTINGUISH WHEN YOU 4 SEE A DIFFERENCE, IF THE DIFFERENCE IS REAL OR IF IT MIGHT 5 JUST BE A FLUKE FROM SAMPLING. 6 LET ME GIVE AN EXAMPLE. IF I WERE TESTING 7 WHETHER A COIN WAS A FAIR COIN, HALF -- 50 PERCENT CHANCE HEADS, 50 PERCENT CHANCE TAILS, AND I TOSSED IT ONLY 10 TIMES, I GOT SIX HEADS AND FOUR TAILS, I WOULD DO MY FORMULAS AND CONCLUDE THAT'S NOT ENOUGH EVIDENCE TO 10 DECLARE STATISTICALLY SIGNIFICANT BIAS IN THAT COIN. WE DIDN'T 11 GIVE 12 IT VERY MUCH -- IT WAS PRETTY CLOSE TO 50 PERCENT. THE 13 FORMULAS FIGURE THAT OUT. 14 BUT IF I FLIPPED IT 1,000 TIMES AND I GOT 80

15 PERCENT HEADS, THE FORMULAS VERY QUICKLY FIGURE OUT A THIS 16 COIN IS NOT A FAIR COIN. 17 THE SAME PRINCIPLE APPLIES HERE. WHEN I HAVE 18 CHECKED THAT SMOKERS HAVE MORE, THE ISSUE ARISES, WELL, IT 19 MAY BE FLUKE OF SAMPLING, BECAUSE WE ONLY HAD A MILLION 20 PEOPLE, OR IS THIS SOMETHING REAL, THAT'S SIGNIFICANTLY 21 SIGNIFICANT? 22 Q. THAT WAS GOING TO BE MY NEXT QUESTION. 23 DID YOU CONDUCT STATISTICAL SIGNIFICANCE TESTING ON THE COMPARISONS YOU MADE FOR EACH OF THESE LIFESTYLE FACTORS BETWEEN SMOKERS AND NONSMOKERS? 25 26 A. YES. 27 Q. AND ARE THE DIFFERENCES THAT YOU'VE INDICATED 28 HERE ON THESE CHARTS STATISTICALLY SIGNIFICANT DIFFERENCES? 4585 A. YES, THEY ARE. 1 2 MR. BROWN: OBJECTION. CALLS FOR A MEDICAL 3 OPINION. MOVE TO STRIKE THE ANSWER. 5 THE COURT: OVERRULED. 6 THE WITNESS: EVERY ONE IS STATISTICALLY SIGNIFICANT. 7 8 MR. FURR: Q. LET ME ASK YOU, WHEN WE CHECK

9	HERE, FOR EXAMPLE, THAT SMOKERS GOT STATISTICALLY LESS
10	EXERCISE THAN NEVER-SMOKERS, DOES THAT MEAN THAT EVERY
11	SMOKER GETS LESS EXERCISE THAN EVERY NEVER-SMOKER?
12	A. NO. IT'S JUST AN AVERAGE RESULT. THERE IS A
13	TENDENCY TOWARD LESS EXERCISE.
14	O. OKAY.
15	DR. WECKER, BASED UPON THE ANALYSIS THAT YOU
JUST	
16	PRESENTED TO US OF THE DIFFERENT DISTRIBUTION OF THESE
17	LIFESTYLE FACTORS BETWEEN SMOKERS AND NONSMOKERS, DO YOU
18	
19	
BE	DITION TO COMPLETE ON THE PROPERTY OF CHARGE
	USED TO ACCURATELY CALCULATE ATTRIBUTABLE MORTALITY
21	PROJECTIONS?
22	MR. BROWN: OBJECTION. CALLS FOR
	EPIDEMIOLOGICAL OPINION. NOT QUALIFIED.
24	THE COURT: OVERRULED.
25	THE WITNESS: YES, I HAVE THAT OPINION.
26	MR. FURR: Q. WHAT IS YOUR OPINION?
27	A. THE CONDITIONS REQUIRED BY THE LEVIN FORMULA
Z/ ARE	A. THE COMPITIONS REQUIRED BY THE DEVIN FORMULA
28	NOT CATTORIES DECAMOR THE TWO CROWNS CMOVEDS AND
∠ 0	NOT SATISFIED BECAUSE THE TWO GROUPS, SMOKERS AND

4586

- 1 NONSMOKERS, DO NOT DIFFER ON ONE THING ONLY, BUT THEY DIFFER
- 2 ON MANY THINGS.
- 3 SO THE LEVIN FORMULA CAN NO LONGER CALCULATE THE
- 4 EFFECT OF SMOKING ALONE, BUT INSTEAD WILL REPORT THE EFFECT
- 5 OF SMOKING OF 24-PLUS THINGS THAT THE CPS-II DIDN'T EVEN 6 MEASURE. PERHAPS AT LEAST THE 24.
- Q. AND THAT LEVIN FORMULA IS THE FORMULA THAT THE CDC USED TO CALCULATE SMOKING-ATTRIBUTABLE MORTALITY BASED ON THE CPS-II DATA, ISN'T IT?
- 10 A. THAT'S A FACT.
- Q. OKAY. DR. WECKER, YOU JUST DEMONSTRATED TO US
 YOUR FINDINGS WITH RESPECT TO THE LIKELIHOOD OF INDIVIDUAL
 RISK FACTORS OCCURRING IN SMOKERS VERSUS NONSMOKERS; IS
 THAT
- 14 CORRECT?
- 15 A. YES.
- 16 Q. DID YOU ALSO ANALYZE THE CPS-II DATA TO DETERMINE
- 17 WHETHER OR NOT THESE LIFESTYLE RISK FACTORS THAT YOU HAVE
- 18 IDENTIFIED FOR US TEND TO CLUSTER IN INDIVIDUAL SMOKERS?
- 19 A. YES, I DID THAT.
- 20 Q. DID YOU PREPARE A CHART THAT ILLUSTRATES YOUR

21 22 23 WE'VE	FINDINGS? A. YES. MR. FURR: LET ME ASK YOU TO LOOK AT WHAT
25 NEVER	MARKED AS 6284, WHICH IS A CHART TITLED "LIFESTYLE FACTORS THAT INCREASE MORTALITY RISK SMOKERS VERSUS -SMOKERS."
26 27 28	(DOCUMENT MORE PARTICULARLY LISTED IN THE INDEX MARKED FOR IDENTIFICATION DEFENDANTS'
4587 1	EXHIBIT # 6284)
2	MR. FURR: Q. AND I ASK YOU TO EXPLAIN WHAT
3 4	YOU FOUND WHEN YOU LOOKED AT THAT QUESTION. MR. BROWN: I'M GOING TO OBJECT TO THIS CHART
5 6	AND I'D LIKE TO BRING IT BACK IN THE HALLWAY AND SHOW YOU WHY.
7 8	THE COURT: OKAY. (COURT AND COUNSEL CONFER OUTSIDE
9 10 11 12	THE PRESENCE OF THE JURY) THE COURT: AFTER A SIDEBAR, I THINK COUNSEL HAVE WORKED THIS OUT BETWEEN THEMSELVES. LET'S PROCEED AND SEE IF THERE'S ANY

OBJECTIONS. 13 LET'S SEE HOW WE GO. 14 MR. FURR: Q. DR. WECKER --THE COURT: I TAKE IT THAT, AFTER THE SIDEBAR, 15 16 WITH THE UNDERSTANDING THAT WE REACHED AT THE SIDEBAR, 17 IS NO OBJECTION TO 6284 BEING SHOWN TO THE JURY, PRESERVING 18 YOUR RIGHT TO OBJECT, DEPENDING ON HOW THINGS GO. 19 MR. BROWN: THAT WE DON'T GO BACK TO THAT 20 THICKET. THE COURT: OKAY. I THINK IT'S BEEN WORKED 21 OUT. 22 MR. FURR: Q. DR. WECKER, I WANT TO ASK YOU SOME QUESTIONS ABOUT 6284. 24 BEFORE WE DO THAT, I WANT TO TALK ABOUT THE LAST 25 ANALYSIS THAT WE JUST DISCUSSED AND MAKE SURE WE ARE CLEAR 26 PRECISELY WHAT YOU INTENDED TO CONVEY TO THE JURY. 27 WHEN WE WERE LOOKING AT THE TWO CHARTS THAT YOU 28 PREPARED BASED ON YOUR ANALYSES OF LIFESTYLE FACTORS AND THE 4588 1 UNEVEN DISTRIBUTION OF THOSE FACTORS BETWEEN SMOKERS AND NONSMOKERS, YOU WERE TESTIFYING THAT THOSE LIFESTYLE

FACTORS ARE FACTORS THAT ARE STATISTICALLY ASSOCIATED WITH AN INCREASED MORTALITY; IS THAT CORRECT? 5 A. THAT'S TRUE. 6 Q. AND TO BE CLEAR, YOU WERE NOT TESTIFYING THAT 7 EACH OF THESE FACTORS HAS BEEN PROVEN MEDICALLY TO BE A CAUSATION OF MORTALITY; IS THAT CORRECT? A. THAT'S TRUE. I HAVE NO OPINION ABOUT CAUSE. 10 THIS IS JUST A STATISTICAL ASSOCIATION CALLED A RISK FACTOR. Q. BY THE WAY, DR. WECKER, THE PHRASE "RISK FACTOR," 12 THAT'S A STATISTICAL TERM? 13 A. YES. 14 Q. WHAT DOES IT MEAN? 15 A. IT MEANS JUST THIS: IF YOU HAVE TWO GROUPS THAT 16 ARE DISTINGUISHED BY SOME LABEL, THAT IS THE EXERCISERS AND 17 THE NONEXERCISERS, IF YOU NOTICE A DIFFERENCE IN THE DEATH 18 RATES IN THOSE TWO GROUPS, THEN EXERCISE BECOMES A RISK 19 FACTOR. IN THE CASE OF EXERCISE, LACK OF EXERCISE. MR. BROWN: I MOVE TO STRIKE THAT. MR. FURR: THAT'S WHAT IS A RISK FACTOR. MR. BROWN: USING "RISK" THERE FALLS INTO THE

20 21 22

PROBLEM WE HAVE.

24 25 SAYS. 26	MR. FURR: YOUR HONOR, THAT'S A STATISTICAL DEFINITION OF THE TERM "RISK FACTOR." THAT'S WHAT IT MR. BROWN: I DON'T THINK SO.
27 28	THE COURT: WHY DON'T YOU ASK HIM SOME MORE QUESTIONS SO THAT IT'S CLEAR TO THE JURY WHAT THE WORD
4589	
1	"RISK" MEANS IN THAT CONTEXT, AND WHETHER IT CONNOTES
2	ANYTHING ABOUT CAUSATION OR WHETHER IT IS LIMITED TO A
3	STATISTICAL ASSOCIATION. BECAUSE I THINK WHAT MR. BROWN
IS	
4	SAYING IS THERE'S SOME POTENTIAL CONFUSION WITH THE USE OF
5 OUT	THE WORD "RISK," AND I THINK WE NEED TO HAVE IT FLESHED
6	A LITTLE FURTHER BEFORE I RULE ON HIS MOTION.
7	MR. FURR: OKAY.
8	O. DR. WECKER, WHEN YOU USE THE TERM "RISK
FACTO	R,"
9	IS IT CORRECT THAT YOU ARE USING THAT PHRASE TO DESCRIBE
ONE	
10	FACTOR THAT IS STATISTICALLY ASSOCIATED WITH AN INCREASED
11	
12	MR. BROWN: YOUR HONOR, SAME OBJECTION.

13 14	"INCREASED LIKELIHOOD" IS THE PROBLEM THERE. MR. FURR: THAT'S PURELY A STATISTICAL
CONCE	PT.
15	MR. BROWN: THAT'S THE ARGUMENT.
16	THE COURT: WHY DON'T YOU CHANGE THE WORD
17	"LIKELIHOOD" TO "INCIDENCE." I THINK IT WILL SOLVE
18	EVERYBODY'S PROBLEM.
19	MR. BROWN: I DIDN'T HEAR YOUR WORD.
20	THE COURT: "INCIDENCE."
21	IF YOU ASK THE QUESTION THAT WAY, YOU MAY BE
ABLE	
22	TO FLESH OUT THE DISTINCTION HERE THAT AT LEAST MR. BROWN
23	HAS IN MIND.
24	AND UNTIL I HEAR MORE, I'M NOT SURE WHETHER OR
25	NOT I AGREE WITH HIM. SO WE NEED TO PURSUE THIS A LITTLE
26	FURTHER. THE PROBLEM IS IN THE USE OF THE WORDS
27	"LIKELIHOOD" AND "RISK" AND SO FORTH.
28	IF WE COULD EXPLAIN SUBSTANTIVELY WHAT WE ARE
4590	
4590 1	TALKING ABOUT WITHOUT USING WORDS THAT MAY HAVE MORE THAN
2	ONE CONNOTATION. AND I HAVE IN MIND WHAT THE WITNESS HAS
3	SAID. I THINK IT WOULD HELPFUL TO THE JURY AND IT WOULD
BE	SAID. I INIME II WOODD REDEFUL TO THE OURT AND II WOODD
В <u>ь</u> 4	HELPFUL TO THE COURT IN RULING ON THE MOTION.
5	DO YOU UNDERSTAND WHAT I'M SAYING?
5	DO 100 UNDERDIADO WHAT I IT DATING:

6 7	MR. FURR: I DO. THE COURT: WHY DON'T YOU PROCEED AND SEE IF
YOU	6312 D.C. 7712 T
8	CAN DO THAT.
9	MR. FURR: Q. OKAY. LET ME ASK YOU FIRST,
10	DR. WECKER, WHEN YOU USE THE TERM "LIKELIHOOD," AS WE USED
11	IT IN RESPONSE TO THE LAST QUESTION, DO YOU MEAN TO IMPLY
A	
	CAUSAL RELATIONSHIP BETWEEN ONE FACTOR AND THE OTHER OR IS
13	IT A STATISTICAL ASSOCIATION?
14	A. NOT A CAUSAL FACTOR. THAT'S THE IMPORTANT
15	DISTINCTION. A RISK FACTOR IS JUST ANY PHENOMENA
ASSOC	CIATED
ASSOC 16	·
16	·
16	STATISTICALLY WITH HIGHER MORTALITY. IT DOESN'T MEAN IT
16 17	STATISTICALLY WITH HIGHER MORTALITY. IT DOESN'T MEAN IT CAUSES THE MORTALITY.
16 17 18	STATISTICALLY WITH HIGHER MORTALITY. IT DOESN'T MEAN IT CAUSES THE MORTALITY. Q. OKAY.
16 17 18 19	STATISTICALLY WITH HIGHER MORTALITY. IT DOESN'T MEAN IT CAUSES THE MORTALITY. Q. OKAY. A. TOBACCO USE IS A RISK FACTOR. IT DOESN'T MEAN
16 17 18 19 IT	STATISTICALLY WITH HIGHER MORTALITY. IT DOESN'T MEAN IT CAUSES THE MORTALITY. Q. OKAY.
16 17 18 19 IT 20	STATISTICALLY WITH HIGHER MORTALITY. IT DOESN'T MEAN IT CAUSES THE MORTALITY. Q. OKAY. A. TOBACCO USE IS A RISK FACTOR. IT DOESN'T MEAN CAUSES ANYTHING. IT COULD, AND I'M NOT HERE TO SAY IT
16 17 18 19 IT 20 21	STATISTICALLY WITH HIGHER MORTALITY. IT DOESN'T MEAN IT CAUSES THE MORTALITY. Q. OKAY. A. TOBACCO USE IS A RISK FACTOR. IT DOESN'T MEAN CAUSES ANYTHING. IT COULD, AND I'M NOT HERE TO SAY IT DOESN'T, BUT THE STATISTICIAN CAN'T PROVE CAUSE WITH THIS KIND OF DATA.
16 17 18 19 IT 20 21	STATISTICALLY WITH HIGHER MORTALITY. IT DOESN'T MEAN IT CAUSES THE MORTALITY. Q. OKAY. A. TOBACCO USE IS A RISK FACTOR. IT DOESN'T MEAN CAUSES ANYTHING. IT COULD, AND I'M NOT HERE TO SAY IT DOESN'T, BUT THE STATISTICIAN CAN'T PROVE CAUSE WITH THIS

```
26
                THE COURT: YOU ARE NOT SAYING THAT IT CAN
FIND
27 TWO GROUPS OF THINGS THAT ARE ASSOCIATED -- YOU ARE NOT
28
     SAYING THAT THE ONE INCREASES THE CHANCE OF THE OTHER
4591
1
     OCCURRING, BUT RATHER YOU ARE MERELY SAYING THAT THE TWO
OF
2
     THEM COEXIST?
3
                THE WITNESS: THAT'S EXACTLY RIGHT.
                THE COURT: IN A STATISTICAL WAY?
4
5
                THE WITNESS: THAT'S EXACTLY CORRECT.
                THE COURT: DOES THAT TAKE CARE OF THE
6
PROBLEM?
7
                MR. BROWN: I THINK SO, YOUR HONOR.
                THE COURT: OKAY.
8
9
                MR. BROWN: HOPEFULLY, WE WON'T DRIFT BACK.
                THE COURT: I THINK THERE'S BEEN SOME
POTENTIAL
11 ARGUMENT ABOUT WHAT WORDS MEAN, BUT I THINK THESE LAST
12
    SERIES OF QUESTIONS AND ANSWERS HAVE FLESHED IT OUT TO
13 EVERYBODY'S SATISFACTION. AT LEAST, I HOPE SO.
14
                IF NOT, ONE OF YOU HAS TO SPEAK UP. OTHERWISE,
15 I'M GOING TO ASSUME THAT THIS HAS BEEN TAKEN CARE OF TO
BOTH
16 OF YOUR SATISFACTIONS.
```

17	MR. BROWN: THANK YOU, YOUR HONOR.
18	THE COURT: OKAY.
19	MR. FURR: Q. OKAY, DR. WECKER. USING THAT
20	UNDERSTANDING OF WHAT THE TERM "RISK FACTORS" MEANS, DID
YOU	
21	ANALYZE THE CPS-II DATA TO DETERMINE WHETHER OR NOT
22	MORTALITY RISK FACTORS TEND TO CLUSTER IN SMOKERS VERSUS
23	NONSMOKERS?
24	A. YES, I DID.
25	O. COULD YOU EXPLAIN THE RESULTS OF YOUR ANALYSIS
	USING 6284.
27	A. THIS IS A MORE COMPLICATED CHART. IT WILL TAKE
Δ,	II. IIIIO IO II MORE COMEDICATED CHERT. II WILL IMEE
	MOMENT TO EXPLAIN IT.
20	MOMBAI TO BALBAIN II.
4592	
1	LET ME JUST PICK ONE OF THE BARS HERE, SAY THE
2	,
2	ONE THAT HAS A 12 ON 11.
2	THIS I DID HAS I HOW HAVE AN OWN
3	WHAT I DID WAS I WENT HAND ME THE
4	QUESTIONNAIRE.
5	Q. THE QUESTIONNAIRE?
6	A. I WENT BACK TO THE QUESTIONNAIRE. AND I FOUND
7	ALL THE PEOPLE THAT HAD EXACTLY 12 RISK FACTORS.
8	I SHOWED YOU 24 BEFORE. SOME PEOPLE HAD MORE

9 THAN 12, SOME HAD LESS, BUT I FOUND ALL THE PEOPLE THAT EXACTLY 12. 10 11 AND THEN I TOOK THE PEOPLE THAT HAD EXACTLY 12 12 RISK FACTORS, AND I PUT THEM INTO TWO PILES, THE SMOKERS AND 13 THE NONSMOKERS, AND REPORTED THE RESULTS ON THIS CHART HERE. 14 WHEN IT COMES TO 12 RISK FACTORS, IT IS THE CASE 15 THAT APPROXIMATELY THE SMOKERS OUTNUMBER THE NONSMOKERS BY ABOUT 3-TO-1. FOR EVERY ONE NONSMOKER, THERE IS ABOUT THREE 17 SMOKERS WITH THE 12 RISK FACTORS. IF YOU GO TO HIGHER NUMBERS OF RISK FACTORS, LIKE 13 OR 14, THE SMOKERS 18 19 PREDOMINATE AS MUCH AS ABOUT 5-TO-1. 20 AND THEN IF YOU GO DOWN TO THE PEOPLE WHO ARE 21 PERFECT, AS WE WISH WE ALL WERE, WITH ALMOST NO RISK FACTORS, IT GOES THE OTHER WAY AROUND. IT'S THE NONSMOKERS 23 WHO ARE ALWAYS EATING THEIR LEAFY GREENS AND TAKING THEIR 24 VITAMINS. 25 WHAT THIS CHART ADDS IS THAT IT SHOWS THE CLUSTERING OF LOTS OF RISK FACTORS TOGETHER IN THE SMOKING 26 POPULATION, OVERWHELMINGLY MORE SO THAN THE NONSMOKING 27 28 POPULATION.

4593	
1	Q. BEFORE YOU SIT DOWN, DR. WECKER, BASED UPON THE
2	ANALYSIS THAT YOU JUST EXPLAINED TO US IN 6284, DO YOU
HAVE	
3	AN OPINION AS TO WHETHER OR NOT THE CPS-II DATABASE
4	SATISFIES THE CONDITION THAT YOU EXPLAINED TO US UNDER
WHICH	
5	THE LEVIN FORMULA CAN BE USED TO ACCURATELY CALCULATE THE
6	ATTRIBUTABLE MORTALITY CALCULATIONS?
7	A. I DO HAVE AN OPINION.
8	Q. AND WHAT IS THAT OPINION?
9	A. WELL, IT'S NOT PROPER TO USE THE LEVIN FORMULA
10	AND THEN CLAIM THAT ALL THE EXCESS DEATHS ARE DUE OR
CAUSE	D
11	BY SMOKING ALONE.
12	MR. BROWN: MOVE TO STRIKE, YOUR HONOR.
13	OBJECTION TO THAT.
14	THE COURT: I'M GOING TO SUSTAIN AND STRIKE
THAT	
15	ANSWER.
16	MR. FURR: OKAY.
17	Q. DR. WECKER, YOU HEARD THE COURT'S RULING.
18	THE COURT: MY UNDERSTANDING ABOUT WHAT YOU
TOLD	
19	US IS YOU'RE NOT GIVING ANY OPINIONS ON CAUSATION; RIGHT?
20	THAT'S WHAT I UNDERSTOOD YOU TO SAY.

21 THE WITNESS: THAT'S TRUE, YOUR HONOR. I'M NOT 22 ABLE TO SAY -- NOT AS A STATISTICIAN, WITH THIS DATA, ABLE TO SAY ONE WAY OR ANOTHER WHETHER ANY OF THOSE RISK FACTORS 24 CAUSE ANY DISEASE. THE COURT: ALL RIGHT.
THE WITNESS: BUT I DO HAVE THE OPINION THAT 25 26 27 NOBODY ELSE CAN DO IT EITHER. 28 THE COURT: DON'T TELL US WHAT YOUR OPINION IS. 4594 1 I'M JUST SAYING TO YOU -- I THOUGHT WHAT YOU SAID AT THE START OF THIS IS YOU'RE NOT GOING TO BE GIVING ANY MEDICAL OPINIONS. THE WITNESS: THIS IS ENTIRELY A STATISTICAL 5 OPINION. 6 THE COURT: YOU GO AHEAD WITH THE NEXT QUESTION. 7 MR. FURR: Q. THE LEVIN FORMULA. REMIND US, 8 DR. WECKER, WHAT IS THE LEVIN FORMULA USED FOR? 9 A. IT CALCULATES THE NUMBER OF EXTRA DEATHS IN ONE 10 GROUP COMPARED TO ANOTHER, SUCH AS THE SMOKING GROUP

11 COMPARED TO THE NONSMOKING GROUP. 12 Q. OKAY. AND LET ME ASK YOU AGAIN WHETHER, BASED ON 13 THIS ANALYSIS, YOU HAVE AN OPINION AS TO WHETHER THE CPS-II DATABASE SATISFIES THE CONDITION UNDER WHICH IT'S 15 APPROPRIATE TO USE THE LEVIN FORMULA TO CALCULATE 16 ATTRIBUTABLE MORTALITY PROJECTIONS? 17 MR. BROWN: THAT'S THE SAME PROBLEM, ATTRIBUTABLE MORTALITY SMOKING DEATHS. THAT'S A MEDICAL 18 19 CAUSE, MEDICAL OPINION. ASSOCIATION. 20 $\mbox{MR. FURR:} \quad \mbox{I NEED TO BE HEARD ON THIS.}$ 21 THE COURT: WHAT HE'S JUST SAYING IS, IF YOU 22 WANT TO USE THE WORD "ASSOCIATION" RATHER THAN THE WORD 23 "CAUSE," HE WILL NOT HAVE AN OBJECTION. 24 MR. FURR: I DIDN'T USE THE WORD "CAUSE." 25 MR. BROWN: HE SAID "ATTRIBUTABLE." IT'S THE 26 SAME THING. 27 THE COURT: IF YOU CAN -- IF YOU CAN REPHRASE IT 28 TO SPEAK IN STATISTICAL TERMS RATHER THAN IN MEDICAL TERMS, 4595 1 I THINK YOU WON'T GET AN OBJECTION. IT MAY WELL BE THAT YOU CAN ASK THE QUESTION

YOU	
3	WANT TO ASK WITHOUT GETTING INTO MEDICAL OBJECTIONS. I
4	DON'T KNOW.
5	MR. FURR: Q. DR. WECKER, BASED ON YOUR
6	ANALYSIS, DO YOU HAVE AN OPINION AS TO WHETHER OR NOT THE
7	CPS-II DATABASE SATISFIES THE CONDITION UNDER WHICH THE
8	LEVIN FORMULA CAN BE USED TO ACCURATELY STATISTICALLY
9	CALCULATE MORTALITY EXCUSE ME ATTRIBUTABLE MORTALITY
10	PROJECTIONS?
11	MR. BROWN: OBJECTION TO "ATTRIBUTABLE."
WE'RE	
12	STILL TALKING ABOUT CAUSE.
13	THE COURT: CAN'T YOU THAT'S THE SAME
14	QUESTION. CAN'T YOU WORD THIS QUESTION TO TAKE OUT AN
15	INFERENCE OR AN IMPLICATION IN THE QUESTION THAT YOU'RE
16	ASKING FOR A MEDICAL OPINION?
17	WHAT HE'S SAYING IS IF YOU START TALKING ABOUT
18	"ATTRIBUTABLE HEALTH CONSEQUENCES," YOU SOUND LIKE YOU'RE
19	ASKING FOR A MEDICAL OPINION.
20	SO THE QUESTION IS: CAN YOU WORD YOUR QUESTION
21	IN A WAY THAT DOESN'T ELICIT A MEDICAL OPINION, OR AT
LEAST	
22	ISN'T AMBIGUOUS IN THAT RESPECT?
23	MR. FURR: YOUR HONOR, I DON'T WANT TO ARGUE IN

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24 FRONT OF THE JURY. I NEED TO BE HEARD ON THIS.
25
               THE COURT: LET'S HAVE A BRIEF SIDEBAR.
26
               (COURT AND COUNSEL CONFER OUTSIDE
27
               THE PRESENCE OF THE JURY)
28
               THE COURT: BACK ON THE RECORD.
4596
1
               I'M ONCE AGAIN HOPEFUL THAT THIS HAS BEEN
WORKED
2 OUT. I UNDERSTAND YOU ARE GOING TO WITHDRAW THAT
QUESTION.
3
               MR. FURR: I WILL WITHDRAW THE QUESTION AND
ASK
4 IT AGAIN.
5
               THE COURT: OKAY.
6
               MR. FURR: I WILL ASK A DIFFERENT QUESTION.
7
               THE COURT: OKAY.
               MR. FURR: Q. DR. WECKER, BASED ON YOUR
    ANALYSIS IN 6284, DO YOU HAVE AN OPINION AS TO WHETHER OR
10
    NOT THE CPS-II DATA SET SATISFIES THE CONDITION UNDER
WHICH
11 IT'S APPROPRIATE TO USE THE LEVIN FORMULA?
12
           Q. AND WHAT IS THAT OPINION?
13
          A. IT DOES NOT SATISFY THAT CONDITION.
14
15
          Q. THANK YOU.
```

16 DR. WECKER, WE BEGAN THIS DISCUSSION TODAY BY 17 TALKING ABOUT THE USE OF THE LEVIN FORMULA TO CALCULATE 18 ATTRIBUTABLE RISK FOR MORTALITY FROM SMOKING; IS THAT 19 CORRECT? 20 A. YES. 21 Q. CAN THAT FORMULA BE USED TO CALCULATE -- TO MAKE 22 THOSE SAME TYPE OF CALCULATIONS FOR OTHER FACTORS? 23 A. YES. 24 AND HAVE YOU DONE SO? Q. A. 25 YES. Q. WHAT OTHER FACTORS HAVE YOU USED THE LEVIN 26 27 FORMULA TO MAKE THOSE TYPE OF CALCULATIONS FOR USING THE 28 CPS-II DATABASE? 4597 1 A. LACK OF EXERCISE, DIET, UNHEALTHY DIET RISK FACTOR, LACK OF SOCIAL SUPPORT, STRESS, HIGH BLOOD PRESSURE, OVERWEIGHT OR UNDERWEIGHT. Q. AND DID YOU PREPARE A SERIES OF CHARTS THAT CAN 5 BE USED TO ILLUSTRATE THESE ADDITIONAL RISKS, ATTRIBUTABLE 6 RISKS? MR. BROWN: MOVE TO STRIKE "ATTRIBUTABLE

RISKS." 8 THE COURT: CAN YOU USE DIFFERENT LANGUAGE? 9 MR. FURR: OKAY, DR. WECKER. HAVE YOU PREPARED 10 A SERIES OF CHARTS THAT CAN BE USED TO ILLUSTRATE THE ADDITIONAL CALCULATIONS YOU MADE ON THE CPS-II DATA SET 12 USING THE LEVIN FORMULA? 13 A. YES, I DID. Q. WOULD YOU STEP DOWN HERE AND USE THESE EXHIBITS 14 TO EXPLAIN TO THE JURY THE ANALYSES THAT YOU MADE AND THE 15 16 RESULTS THAT YOU FOUND. A. I WILL. 17 18 MR. BROWN: WOULD YOU GIVE ME THE NUMBERS. 19 (DOCUMENT MORE PARTICULARLY 20 LISTED IN THE INDEX MARKED 21 FOR IDENTIFICATION DEFENDANTS' 22 EXHIBIT # 6285) 23 MR. FURR: Q. LET ME ASK YOU TO BEGIN BY USING 24 EXHIBIT 6285, TITLED "'ATTRIBUTABLE' DEATHS VERSUS ACTUAL 25 DEATHS" AND EXPLAIN --MR. BROWN: I'M GOING TO OBJECT TO THE PHRASE 26 ON THAT, ON THE TOP. 28 MR. FURR: THIS IS VERY SUPERFICIAL.

4598	
1	MR. BROWN: "ATTRIBUTABLE" APPEARS ON SEVERAL
OF	
2	THESE. I OBJECT TO IT.
3	THERE'S THREE OF THEM THAT IT APPEARS ON.
4	THE COURT: CAN YOU CLARIFY WHAT THE WORD
5	"ATTRIBUTABLE" MEANS WITH THE SERIES OF QUESTIONS?
6	MR. FURR: Q. DR. WECKER, WOULD YOU EXPLAIN
7	WHAT THE WORD "ATTRIBUTABLE" MEANS ON THIS CHART AND
8	MR. BROWN: I'M NOT COMFORTABLE WITH THAT
9	QUESTION. MAYBE A LEADING QUESTION.
10	THE COURT: THAT'S FINE.
11	WHY DON'T YOU GO AHEAD AND ASK A LEADING
12	QUESTION.
13	MR. FURR: Q. DR. WECKER, WE ARE GETTING
HUNG	
14	UP ON THE WORD "ATTRIBUTABLE." AND LET'S BE CLEAR.
15	WHEN YOU USE THE WORD "ATTRIBUTABLE" IN THE
16	CALCULATIONS THAT YOU'VE MADE, YOU DO NOT MEAN TO INFER,
DO	
17	YOU, THAT ONE FACTOR IS CAUSING OR CAUSALLY RELATED TO THE
18	OTHER FACTOR THAT'S BEING ANALYZED, DO YOU?
19	A. I DO NOT MEAN TO INFER THAT.
20	Q. AND DO YOU MEAN TO COMMUNICATE TO THE JURY THAT

21 THE FACTORS THAT YOU ARE MAKING, THESE STATISTICAL COMPARISONS, ARE STATISTICALLY ASSOCIATED AS OPPOSED TO 23 NECESSARILY CAUSALLY ASSOCIATED? 24 A. THAT'S CORRECT. THERE IS STATISTICAL 25 ASSOCIATION, NOT NECESSARILY CAUSAL ASSOCIATION. THE COURT: IT'S BEEN EXPLAINED NOW. 27 MR. BROWN: I DIDN'T OBJECT TO THAT. THE COURT: ALL RIGHT. LET'S GO FORWARD. 28 4599 1 MR. FURR: Q. DR. WECKER, LET ME ASK YOU, 2 BEGINNING WITH 6285, EXPLAIN TO THE JURY THE ADDITIONAL 3 CALCULATIONS THAT YOU MADE ON THE CPS-II DATA SET USING THE 4 LEVIN FORMULA. 5 A. OKAY. THIS IS THE FIRST SERIES OF THREE CHARTS 6 THAT WILL ALL HAVE THE SAME TITLE "'ATTRIBUTABLE' DEATHS 7 VERSUS ACTUAL DEATHS." 8 THE ACTUAL DEATHS (INDICATING) ARE THE ONES ON 9 THIS FIRST CHART. AND THERE ARE COUNTED HERE 1,108,000 ACTUAL DEATHS. 10 NOW, THESE WERE THE DEATHS THAT WERE COUNTED UP 11 12 AND REPORTED IN THE CENTER FOR DISEASE CONTROL REPORT, WHERE 13 THE 420,000 ATTRIBUTABLE DEATHS WERE REPORTED. 14 Q. WHAT YEAR WAS THAT, DR. WECKER?

- A. 19 -- THE DEATHS WERE IN 1990. THE REPORT WAS 15 15 LATER, '96, I THINK. 17 Q. OKAY. 18 THESE AREN'T ALL THE DEATHS FROM 1990. THESE Α. 19 WERE THE ONES THEY COUNTED UP THAT WERE USED IN THEIR 20 21 SO THE AUTOMOBILE ACCIDENTS WERE NOT IN HERE, BUT 22 THE DEATHS THAT THEY DID LOOK AT FOR DOING THE CALCULATION THAT ENDED UP WITH THE 420,000 ARE THESE DEATHS HERE, 23 THESE 24 1.1 MILLION (INDICATING). 25 SO IT'S 420,000 OUT OF 1.1 MILLION THAT THEY 25 SO IT'S 420,00 26 REPORTED IN THAT ARTICLE. 27 Q. AND DID YOU DO A CALCULATION USING THE LEVIN 28 FORMULA FOR LACK OF EXERCISE USING THE CPS-II DATA SET? 4600 1 A. YES. AS THE TITLE SAYS, I'M GOING TO BE
- 3 ARE CALLED ATTRIBUTABLE DEATHS, WHERE "ATTRIBUTABLE DEATHS"
- 4 MEANS EXACTLY THIS AND ONLY THIS. IT MEANS THE LEVIN

COMPARING THE ACTUAL 1 MILLION DEATHS TO A NUMBER OF WHAT

5 FORMULA.

2

6	MR. FURR: LET ME ASK YOU TO USE WHAT WE
MARKE	ID .
7	AS 6286 TO EXPLAIN YOUR ANALYSIS OF LACK OF EXERCISE.
8	(DOCUMENT MORE PARTICULARLY
9	LISTED IN THE INDEX MARKED
10	FOR IDENTIFICATION DEFENDANTS'
11	EXHIBIT # 6286)
12	THE WITNESS: OKAY. WHEN YOU APPLY THE LEVIN
13	FORMULA TO THE RISK FACTOR LACK OF EXERCISE, WHICH IS
14	STATISTICALLY ASSOCIATED, LACK OF EXERCISE WITH HIGHER
15	MORTALITY, YOU GET THE RESULT WHICH IS WHAT STATISTICIANS
16	CALL "ATTRIBUTABLE DEATHS" IT'S JUST THE NAME OF
17	567,000 ATTRIBUTABLE DEATHS.
18	IT DOESN'T MEAN CAUSAL. IT'S JUST A TERM
THAT'	S
19	USED TO DESCRIBE THE RESULT OF THE LEVIN FORMULA. IT'S
20	CALLED "'ATTRIBUTABLE' DEATHS."
21	Q. OKAY. HAVE YOU USED THE LEVIN FORMULA TO
ANALY	ZE
22	THE CPS-II DATA SET FOR OTHER FACTORS?
23	A. YES. I USED LACK OF EXERCISE, AND THEN I DID
24	SOME OTHERS.
25	MR. FURR: LET ME ASK YOU TO USE 6287 TO
26	DESCRIBE YOUR OTHER ANALYSES AND THE RESULTS.
27	(DOCUMENT MORE PARTICULARLY
28	LISTED IN THE INDEX MARKED

4601 1 FOR IDENTIFICATION DEFENDANTS' 2 EXHIBIT # 6287) 3 THE WITNESS: I ALSO LOOKED AT UNHEALTHY DIET, LACK OF VITAMINS, RICH FOODS, SO BASED ON THE DIET QUESTIONS 5 IN THE QUESTIONNAIRE, USING THE LEVIN FORMULA EXACTLY THE 6 SAME WAY THE CDC DID TO COME UP WITH THE 420,000, EXCEPT I 7 DISTINGUISHED RISK FACTORS TO UNHEALTHY DIET. 8 I GET 758,000 WHAT ARE CALLED BY STATISTICIANS 9 ATTRIBUTABLE DEATHS. IT DOESN'T MEAN CAUSE. IT'S JUST THE 10 RESULT OF THE LEVIN FORMULA. 11 IT MEANS EXTRA DEATHS IN THAT GROUP, AS I 12 EXPLAINED WITH THE LITTLE DOTS EARLIER. 13 Q. I TAKE IT YOU ALSO DID A SIMILAR CALCULATION 14 USING THE LEVIN FORMULA FOR LACK OF SOCIAL SUPPORT OR 15 STRESS? 16 A. YES. 17 Q. WHAT DID YOU FIND? A. FOR LACK OF SOCIAL SUPPORT, WHICH IS A LARGE 18 19 RECOGNIZED RISK FACTOR, THERE WERE 824,000 WHAT ARE CALLED 20 ATTRIBUTABLE DEATHS. IT DOESN'T MEAN THEY'RE CAUSED. IT'S

21 JUST THE RESULT OF THE LEVIN FORMULA, THE SAME WAY THE 22 420,000 IS A RESULT OF THE LEVIN FORMULA. 23 AND THEN I -- JUST TO SPEED ALONG HERE -- I DID HIGH BLOOD PRESSURE AND OVERWEIGHT-UNDERWEIGHT, FOR 24 170,000, 161,000. 26 Q. I TAKE IT YOU ADDED UP THE RESULTS OF YOUR LEVIN FORMULA CALCULATIONS ON CPS-II? A. YES. 4602 1 Q. AND YOU CAME UP WITH 2,480,000 ATTRIBUTABLE 2 DEATHS USING THAT -- USING THAT WORD AS YOU DEFINED IT FOR 3 4 A. YES. AS IT'S DEFINED BY STATISTICIANS AND IN THE 5 LITERATURE. 6 I ADDED UP THE ATTRIBUTABLE DEATHS AND GOT OVER 7 ABOUT TWO AND A HALF MILLION ATTRIBUTABLE DEATHS OUT OF ONLY

Q. AND BASED UPON THE ANALYSIS YOU DID OF

10 LEVIN FORMULA CALCULATIONS ON CPS-II, DOES THAT AFFECT

8

9

ADDITIONAL

1.1 MILLION ACTUAL DEATHS.

YOUR 11 OPINION WITH RESPECT TO WHETHER OR NOT THE CPS-II DATA SET 12 SATISFIES THE CONDITION UNDER WHICH IT'S APPROPRIATE TO USE 13 THE LEVIN FORMULA? 14 A. Q. AND WHAT IS YOUR OPINION? 15 16 A. MY OPINION IS THAT IT'S NOT APPROPRIATE TO USE 17 THE LEVIN FORMULA IN CONJUNCTION WITH THE CPS-II DATA 18 BECAUSE ANY ONE RISK FACTOR IS NOT ISOLATED. 19 SO WHEN YOU USE THE LEVIN FORMULA, YOU DON'T JUST 20 GET THE EFFECT OF ONE THING. YOU GET KIND OF A BAG OF 21 DIFFERENT RISK FACTORS ALL TOGETHER. 22 SO LACK OF EXERCISE, 567,000 ATTRIBUTABLE DEATHS, 23 DOESN'T MEAN THAT THE LACK OF EXERCISE ALONE CAUSED 567,000 DEATHS. IT DOESN'T MEAN THAT. 25 WHAT IT DOES MEAN IS PEOPLE WHO DON'T EXERCISE 26 HAVE A HIGHER DEATH RATE TO THIS AMOUNT. 27 Q. OKAY. 28 Α. WHAT CAUSES IT IS NOT CLEAR, BUT IT'S CERTAINLY 4603 1 NOT THE ONE THING, LACK OF EXERCISE.

```
2
                MR. FURR: WHY DON'T YOU HAVE A SEAT, PLEASE.
 3
                YOUR HONOR, I'M LOOKING FOR PLAINTIFFS' EXHIBIT
     1804, WHICH WE USED EARLIER TODAY.
                MR. BROWN: SORRY. I DIDN'T HEAR YOU.
 5
 б
                MR. FURR: PLAINTIFFS' EXHIBIT 1804.
 7
                MR. BROWN: YOU WALKED THAT WAY WITH IT.
 8
                WHAT IS IT?
                THE COURT: IS THAT THE DATA?
 9
                MR. BROWN: THE CDC CHART.
10
                THE COURT: YES.
11
12
                MR. FURR: YES. OKAY. THANKS.
13
                COULD I HAVE THE LIGHTS, PLEASE.
14
                THANKS, LUCY.
15
                MS. CHABER: IT SHOULD BE NOTED THAT WE DID
NOT
16 TAKE IT.
17
                THE COURT: OKAY. FOR THE RECORD, WHAT ARE
YOU
18 ABOUT TO SHOW?
19 MR.
               MR. FURR: I'M ABOUT TO SHOW PLAINTIFFS'
EXHIBIT
20 1804.
21
                THE COURT: OKAY.
22
                MR. FURR: Q. DR. WECKER, I SHOWED YOU THIS
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23 SLIDE EARLIER. DO YOU RECALL THAT?
24
           A. YES.
25
           Q. THIS 420,000 ANNUAL DEATHS FROM SMOKING THAT
26 APPEARS ON THIS CDC CHART, THAT'S A NUMBER THAT'S
CALCULATED
27 USING THE LEVIN FORMULA, ISN'T IT?
28
      A. YES.
4604
          Q. IF YOU WERE TO PUT ON THIS CHART THE
1
CALCULATIONS
     THAT YOU MADE USING THE LEVIN FORMULA ON THE SAME DATABASE
 3
     FOR --
 4
                MR. BROWN: OBJECTION.
 5
                MR. FURR: Q. -- DIET AND LACK OF EXERCISE,
 6
    WHAT WOULD YOUR NUMBER BE?
 7
                MR. BROWN: OBJECTION, YOUR HONOR.
                THE COURT: THAT CALLS FOR A MEDICAL OPINION.
 8
 9
                MR. BROWN: ABSOLUTELY.
                THE COURT: IT DOES. SUSTAINED.
10
                MR. FURR: OKAY. LIGHTS.
11
                THANK YOU, DR. WECKER. THAT'S ALL I HAVE, YOUR
12
13
   HONOR.
14
                THE COURT: OKAY. MR. BROWN.
15
                I ASSUME NO OTHER DEFENSE COUNSEL HAVE ANY
16 QUESTIONS?
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17 18	MR. HARDY: NO, YOUR HONOR.
19 20 DATA	CROSS-EXAMINATION BY MR. BROWN: Q. WHEN STATISTICIANS TAKE
21 22 23 24 25 26 WHY	omittee out officer in order that the fine of out of the out of th
27 28 AN	I CAN'T AGREE WITH THAT. Q. LET ME ASK ANOTHER QUESTION. LET ME GIVE YOU
4605 1 2 3 SOME	EXAMPLE. YOU HAVE A LARGE TRUCK THAT'S FILLED WITH DIFFERENT KINDS OF CATTLE, DAIRY COWS, SOME SEMENTALS,
4 5 6	WHITE-FACED CATTLE. THERE'S ABOUT 100 OF THEM IN THIS TRUCK. THIS TRUCK GOES OVER THE CLIFF AND 70 OF THEM

ARE 7 KILLED, AND IT TURNS OUT TO BE ALL WHITE-FACED CATTLE. THE SEMENTHALS ARE THERE. THEY'RE HURT, BUT THEY'RE ALIVE. 8 THE 9 DAIRY CATTLE ARE ALIVE. 10 BUT WHAT A STATISTICIAN WOULD BE DOING, WHAT YOU HAVE BEEN DOING HERE IN COURT IS TELLING US THAT, IN THAT 11 12 TRUCK, THERE WAS THIS BUNCH OF CATTLE, AND STATISTICALLY, OF 13 THE DEATHS, THEY ALL HAPPENED TO BE 100 PERCENT WHITE-FACED 14 CATTLE, AND THEN YOU'D BREAK DOWN THE REST AS TO WHO WAS 15 ALIVE. THAT WOULD BE AN EXAMPLE OF WHAT YOU HAVE DONE HERE, 16 ISN'T IT? 17 A. I DON'T SEE THIS CONNECTION. MAYBE WE COULD 18 STUDY WHAT CAUSED THE TRUCK TO GO OFF THE CLIFF. MAYBE THEY 19 WERE RIDING IN THE FRONT AND THE TRUCK HIT THE FRONT END. Q. THAT'S FAIR. YOU STARTED OFF STATISTICALLY TO SAY, OF THE DEAD CATTLE, 70 OF THEM WERE WHITE-FACED? A. THAT WOULD BE A FACT. 22 Q. A STATISTICAL FACT? 23 24 A. YES.

25 THEN	Q. IT WOULD BE AN ASSOCIATION WE WOULD KNOW
26 IN	THAT OF THE DEAD CATTLE, 70 OF THOSE CATTLE THAT DIED
27	FACT, 100 PERCENT OF THE DEAD WERE THE WHITE-FACED CATTLE,
	BUT IT WOULDN'T TELL US BY ITSELF WHY THEY DIED, WOULD IT?
4606	
1	A. NO. THAT DOESN'T TELL YOU WHY THEY DIED UNTIL
2	YOU INVESTIGATE FURTHER.
3	Q. FOR THAT PUTTING INTO THE CONTEXT, AFTER WHAT
WE	
4	HAVE BEEN DOING TODAY, YOU NEED A MEDICAL DOCTOR TO LOOK
5	AT OR A SCIENTIST TO LOOK IT AND DECIDE WHY DID THOSE
6	CATTLE DIE?
7	A. LIKE AN AUTOPSY?
8	Q. YES. THAT WOULD BE A GOOD WAY TO DO IT.
9	A. I AGREE WITH THAT.
10	Q. MAYBE FIVE OF THOSE CATTLE WERE ALREADY DEAD IN
11	THE TRUCK FROM SOME DISEASE. MAYBE THEY WERE KEPT AT TOO
12	HIGH AN ALTITUDE AND THEY DEVELOPED CONGESTIVE HEART
13	FAILURE. WHITE-FACED CATTLE DO THAT, YOU KNOW.
14	ARE YOU AWARE OF THAT?
1 5	A TIM HADDY TO ACCIME IT

16 Q. ALL RIGHT. ENOUGH. LET ME GO ON TO SOME OTHER 16 Q. 17 QUESTIONS. 18 SOME SMART KID ONCE TOLD ME -- I THINK IT WAS ONE 19 OF MINE -- THAT HE'D LEARNED IN COLLEGE THAT ASSOCIATION OR CORRELATION, I THINK HE USED, BUT ASSOCIATION --CORRELATION DOES NOT EQUAL CAUSATION. THAT'S WHAT HE TOLD ME. WOULD YOU AGREE WITH THAT? 22 ABSOLUTELY. HE TOLD YOU THAT RIGHT. 23 Q. I TOLD YOU HE WAS A SMART KID. OKAY. 24 25 LET ME ASK YOU SOME QUESTIONS ABOUT WHAT YOUR BACKGROUND HAS BEEN, AND WE CAN JUST GO THROUGH THIS 26 27 RAPIDLY, I THINK. 28 YOU'VE SAID SOME OF THIS ON DIRECT ALREADY. I 4607 1 WILL TRY TO SHORTCUT IT AND NOT TO MAKE IT TOO LONG HERE. YOUR TRAINING, YOUR EXPERIENCE, YOUR EXPERTISE 3 DOES NOT FALL INTO MEDICAL SCIENCE. YOU ARE NOT A QUALIFIED 4 EXPERT IN MEDICAL SCIENCE? 5 A. THAT'S TRUE, EXCEPT TO THE EXTENT THAT 6 STATISTICAL SCIENCE MAKES CONTRIBUTIONS TO MEDICAL SCIENCE.

7 BUT I MAKE NO PRETENSE TO BE A MEDICAL DOCTOR. 8 Q. AND CONTRIBUTIONS TO MEDICAL SCIENCE COME FROM Α 9 LOT OF DIFFERENT PEOPLE. 10 BUT IN TERMS OF LOOKING AT THE POPULATION AND 11 DECIDING WHAT CAUSED THE DEATHS IN THAT POPULATION, THAT'S WHAT EPIDEMIOLOGISTS DO; ISN'T THAT RIGHT? 13 A. IF THEY ARE DOING IT FULL TIME, THEY ARE 14 STATISTICIANS. 15 STATISTICIANS WHO WORK FULL TIME ON HUMAN HEALTH 16 CALL THEMSELVES EPIDEMIOLOGISTS, YES. 17 Q. ON AN EPIDEMIOLOGICAL TEAM DOING AN 18 EPIDEMIOLOGICAL STUDY -- LET ME STOP RIGHT THERE. 19 HAVE YOU EVER BEEN ON ONE OF THESE TEAMS? 20 A. SURE. I HAVE STUDIED ISSUES OF HUMAN HEALTH --21 Q. NO. NO. A. -- WITH NTH. Q. HAVE YOU EVER BEEN ON A TEAM THAT CONSISTS OF 24 EPIDEMIOLOGISTS WHO WERE IN CHARGE OF REACHING THE RESULTS, 25 BUT THEY HAD STATISTICIANS THAT GAVE THEM HELP WHERE THEY 26 WANT STATISTICAL HELP? 27 A. I HAVE BEEN ON SUCH TEAMS, BUT I WAS THE 28 STATISTICIAN. EPIDEMIOLOGISTS ARE THE SAME GUY.

4608 SO I HAVE BEEN ON SUCH TEAMS. YOU CAN CALL IT 1 2 THE STATISTICIAN OR THE EPIDEMIOLOGIST --Q. YOU ARE NOT AN EPIDEMIOLOGIST? MR. FURR: EXCUSE ME, YOUR HONOR. 5 I THINK THE WITNESS SHOULD BE ALLOWED TO FINISH HIS ANSWER. 6 7 THE COURT: I AGREE. 8 HAVE YOU FINISHED YOUR ANSWER? 9 THE WITNESS: WE CAN START AGAIN. 10 MR. BROWN: Q. DO YOU HAVE A DEGREE IN 11 EPIDEMIOLOGY? 12 A. NO. I'M A STATISTICIAN. Q. HAVE YOU EVER PUBLISHED IN A PEER-REVIEW 13 JOURNAL AN EPIDEMIOLOGICAL STUDY RESULT? A. WELL, I THINK SO. I RECALL MY STUDY ON 16 "CORRECTING FOR OMITTED-VARIABLES AND MEASUREMENT-ERROR 17 BIAS IN REGRESSION WITH AN APPLICATION TO THE EFFECT OF LEAD 18 ON IQ." 19 LEAD IS AN ELEMENT THAT IS BAD FOR YOU, IF YOU 20 EAT TOO MUCH, AND THERE'S STATISTICAL DATA SUGGESTING IT 21 MIGHT ACTUALLY LOWER IQ IN CHILDREN WHO EAT TOO MUCH OF

```
IT,
22 LIKE FROM LEAD PAINT.
23
              AND I DEVELOPED A METHODOLOGY FOR ASSESSING
THOSE
24 KINDS OF SITUATIONS.
               MR. BROWN: Q. WHEN YOU HAVE CONFOUNDING
    VARIABLES, THEN EPIDEMIOLOGISTS TRADITIONALLY AND
26
TYPICALLY
27 ADJUST FOR THOSE CONFOUNDING VARIABLES, DON'T THEY?
          A. THEY WOULD, IF THEY COULD, BUT USUALLY CAN'T.
28
SO
4609
1
    YOU DESIGN AN EXPERIMENT TO GET AROUND THAT PROBLEM.
2
          Q. WHEN YOU HAVE, FOR EXAMPLE, SMOKERS WHO ARE
ALSO
3
    INSULATION WORKERS, INSULATING WITH ASBESTOS --
           A.
5
           Q.
               -- THEN YOU HAVE CONFOUNDING VARIABLES, DON'T
6
    YOU?
7
               YOU HAVE VERY HEAVY ASBESTOS EXPOSURE AND YOU
8 HAVE, IN SOME CASES, VERY HEAVY SMOKING HISTORIES;
CORRECT?
9
          A. YES.
          Q. THAT'S BEEN STUDIED, HASN'T IT?
10
11
          A. YES.
```

12	Q. THAT WAS STUDIED BY ONE OF THE WORLD'S LEADING
13	EPIDEMIOLOGISTS AND SCIENTISTS IN THE FIELD OF ASBESTOS;
14	CORRECT?
15	A. IT'S BEEN STUDIED BY MANY PEOPLE. I DON'T KNOW
16	WHO YOU HAVE IN MIND.
17	Q. DOES DR. SELIKOFF RING ANY BELLS?
18	A. YES. I READ THAT.
19	Q. SELIKOFF DID A STUDY OVER MANY YEARS AND OVER
20	THOUSANDS OF INSULATORS?
21	A. I RECALL IT'S A LARGE SAMPLE.
22	Q. VERY LARGE.
23	AND HE ADJUSTED IN THAT STUDY FOR SMOKING, DID
HE	
24	NOT?
25	A. YES, HE MADE SMOKING ADJUSTMENTS.
26	Q. AND HE CAME TO THE CONCLUSION, HE AND HIS TEAM
OF	
27	EPIDEMIOLOGISTS HE'S AN EPIDEMIOLOGIST SCIENTISTS OF
28	ALL KINDS, HIS TEAM CAME TO A CONCLUSION THAT THEY HAD
4610	
1	PROPERLY ADJUSTED OUT SMOKING FROM ASBESTOS EXPOSURE, AND
2	THEY APPLIED A RELATIVE RISK TO BOTH CAUSATIONS, DIDN'T
3	THEY?

4	MR. FURR: OBJECTION, YOUR HONOR. CALLS FOR
5 6	HEARSAY. THE COURT: SUSTAINED.
7	MR. BROWN: THIS IS CROSS-EXAMINATION.
8	THE COURT: IT'S HEARSAY.
9	MR. BROWN: Q. DO YOU BELIEVE THAT THE
	SELIKOFF STUDY OF INSULATORS, WHICH IS THE ONE WE HAVE
JUST	
	BEEN REFERRING TO, IS A RELIABLE AUTHORITY?
12	A. IT'S BEEN A LONG TIME SINCE I HAVE LOOKED AT
IT.	
13	IF YOU HAD A COPY HERE AND WE HAD A BREAK, I
14	COULD GET YOU AN ANSWER TO THAT.
15	O. LET ME ASK YOU THIS OUESTION.
16	A. I DON'T REMEMBER IT THAT WELL.
17	Q. DO YOU HAVE ANY QUESTION IN YOUR MIND THAT
18	DR. SELIKOFF AND HIS TEAM THAT LOOKED AT SMOKING AND
19	ASBESTOS EXPOSURE AND MADE CERTAIN CONCLUSIONS WERE NOT
20	RELIABLE AUTHORITIES?
21	MR. ROSSE: I OBJECT. BEYOND THE SCOPE OF
22	DIRECT.
23	THE COURT: WELL, I DON'T THINK IT'S BEYOND
THE	
24	SCOPE OF DIRECT. BUT I DON'T THINK IT'S REALLY RELEVANT
25	WHETHER HE HAS ANY QUESTION IN HIS MIND ON THAT SUBJECT OF
26	

27 BUT IF THE OBJECTION IS JUST BEYOND THE SCOPE, I 28 WOULD OVERRULE THAT. BUT I DON'T THINK THE ANSWER TO THIS 4611 QUESTION IS PERTINENT TO WHAT I UNDERSTAND TO BE THE PURPOSE OF THE QUESTION. BUT YOU CAN GO AHEAD AND ASK IT, BECAUSE THERE IS 4 NO OBJECTION ABOUT RELEVANCE YET. 5 SO YOU CAN GO AHEAD. 6 MR. BROWN: Q. YOU CAN ANSWER. 7 IT'S BEEN YEARS SINCE I HAVE READ THE SELIKOFF A. 8 ARTICLES. AND SO I'D LIKE TO TAKE A LOOK AT THEM. IF YOU HAVE THEM WITH YOU, AND WE HAVE A BREAK, I COULD TELL YOU 9 IN 10 A FEW MINUTES IF I -- WHAT MY POSITION IS ON THEM. 11 Q. LET ME ASK YOU THIS: HAVE YOU EVER ARRIVED AT THE OPINION THAT SOMETHING ABOUT THE WAY DR. SELIKOFF AND 12 13 HIS PEOPLE WORKED AND DEVELOPED THEIR INFORMATION AND THE CONCLUSIONS THEY REACHED IN STUDYING THOSE INSULATORS AND 14 15 SMOKERS WITHIN THE INSULATORS WAS FLAWED? 16 A. IF YOU ACCEPT AN ANSWER THAT'S SORT OF A BEST

17 EFFORT, BASED ON A VAGUE RECOLLECTION, I CAN ANSWER, BUT I 18 HAVEN'T LOOKED AT THOSE PAPERS IN A LONG TIME. 19 IF YOU WILL UNDERSTAND THAT'S THE NATURE OF MY 20 ANSWER, I'LL TRY TO ANSWER IT. 21 THE COURT: WELL, THE LEGAL LINE HERE IS THAT YOU'RE NOT PERMITTED TO GUESS. BUT IF YOU HAVE A REASONABLE 23 RECOLLECTION, YOU CAN GIVE US YOUR RECOLLECTION. THE QUESTION IS WHETHER YOU ARE GUESSING OR 24 25 WHETHER YOU'RE TESTIFYING FROM RECOLLECTION. 26 MR. BROWN: Q. WHAT I ASKED PROBABLY DOESN'T CALL FOR A GUESS. 27 28 I ASKED FOR -- HAVE YOU EVER FORMED AN OPINION 4612 1 THAT THAT SELIKOFF STUDY ON THOSE INSULATORS WAS FLAWED? MR. ROSSE: YOUR HONOR, I WOULD HAVE A RELEVANCE OBJECTION. I RENEW MY BEYOND THE SCOPE ALSO. THE COURT: I'LL ALLOW HIM TO ANSWER. THE WITNESS: IT'S BEEN A LONG TIME. I CAN 5 THINK OF ONE OPINION THAT I THINK I FORMED WHEN I LOOKED 6 ΑT THAT MATERIAL A FEW YEARS AGO. 8 MR. BROWN: Q. AND YOU ARRIVED AT AN OPINION,

DID YOU, THAT DR. SELIKOFF'S INSULATION -- INSULATOR STUDY 10 WAS A FLAWED STUDY? 11 A. I DIDN'T THINK OF IT IN QUITE THOSE STARK TERMS, 12 BUT I THINK IT'S FAIR TO CALL IT FLAWED, YES. Q. ARE YOU FAMILIAR WITH DR. DOLL'S STUDY OF SMOKING AS RELATED TO LUNG CANCER DONE IN THE EARLY 1950S? 15 A. YOU MEAN THE DOCTOR STUDY? 16 Q. I'M TALKING ABOUT SIR RICHARD DOLL. 17 HE'S DONE A LOT OF WORK. ON THE BRITISH DOCTORS? 18 Q. THAT WOULD BE FINE. 19 A. MAYBE YOU SHOULD --20 21 Q. NO. I SAID THAT WOULD BE FINE. 22 A. I DON'T KNOW WHAT YOU ARE TALKING ABOUT. 23 Q. THE BRITISH DOCTORS WOULD BE ALL RIGHT. A. OKAY. 24 Q. ARE YOU FAMILIAR WITH THAT? 25 26 A. YES. YES. 27 Q. DO YOU THINK DR. DOLL'S STUDY OF THE BRITISH DOCTORS, TRYING TO DETERMINE WHETHER LUNG CANCER -- EXCUSE

4613

1 ME -- WHETHER SMOKING WAS A MAJOR CAUSE OF LUNG CANCER IS FLAWED IN SOME WAY? 3 MR. FURR: EXCUSE ME, YOUR HONOR. THIS IS NOT AN OBJECTION, BUT I WANT TO PRESERVE THIS OPENING THE DOOR 5 TO THE TESTIMONY THAT I TRIED TO ELICIT. THE COURT: HE DIDN'T TESTIFY ABOUT CAUSE, SO 6 7 HE'S SAYING YOU CAN ASK HIM THIS QUESTION, BUT IF YOU DO, 8 THEN HE RESERVES THE RIGHT TO ASK HIM ABOUT CAUSE. 9 SO YOUR QUESTION TO HIM --10 MR. BROWN: I'M ASKING ABOUT DR. DOLL. THE COURT: -- IT GOES BEYOND THE SCOPE OF 11 WHAT 12 HE TESTIFIED ABOUT, BECAUSE HE DID NOT PURPORT TO TESTIFY 13 ABOUT CAUSE. 14 MR. BROWN: ALL RIGHT. 15 THE COURT: BUT HE'S NOT MAKING THE OBJECTION. 16 HE'S JUST SAYING THAT IF YOU ASK HIM THAT QUESTION, THEN $_{
m HE}$ 17 RESERVES THE RIGHT TO GO INTO CAUSE AS WELL. 18 BUT HE'S STAYED WAY FROM CAUSE OVER YOUR 19 OBJECTION. WITH YOUR OBJECTION, HE STAYED AWAY FROM IT. 20 AND I RULED IN YOUR FAVOR ON THAT. 21 MR. BROWN: MY OLD PARTNER FRANK FINNEY USED TO 22 SAY "I'M FEARLESS, BUT THAT TERRORIZES ME." 23 THE COURT: OKAY.

24 25 26 27 28	MR. BROWN: OKAY. Q. WAS DR. DOLL'S STUDY STATISTICALLY FLAWED? A. YES. I COULD POINT OUT WEAKNESSES THAT ARE FAIR I BELIEVE IT'S FAIR TO CALL A FLAW, YES. Q. LET ME ASK YOU ABOUT SOME OTHER STUDIES.
4614	
1	ARE YOU FAMILIAR WITH THE HAMMOND STUDY IN 1996
2	IN WHICH HE STUDIED THE AMERICAN CANCER SOCIETY CPS-I
DATA?	
3	A. I DON'T REMEMBER A '96 HAMMOND STUDY. I RECALL
4	AN EARLIER HAMMOND STUDY.
5	ARE YOU SURE YOU HAVE THE DATE RIGHT?
6	Q. I THINK SO.
7	LET'S TALK ABOUT THE EARLIER STUDY.
8	YOU ARE FAMILIAR WITH THE HAMMOND STUDY THAT
9	LINKED SMOKING WITH LUNG CANCER?
10	A. IF BY "LINK" YOU MEAN ASSOCIATION, YES.
11	Q. WELL, I WON'T ARGUE WITH YOU ABOUT WHAT IT
12	FOUND.
13	BUT I WILL ASK YOU THIS: IN YOUR OPINION, WAS
14	THE HAMMOND STUDY ANY OF THE HAMMOND STUDIES YOU'RE
15 16	FAMILIAR WITH STATISTICALLY FLAWED? MR. FURR: OBJECTION, YOUR HONOR. VAGUE,

```
UNLESS
17 HE IDENTIFIES THE STUDY.
     THE COURT: SUSTAINED.
18
19
               MR. BROWN: DID YOU SUSTAIN IT?
20
               THE COURT: YES, BECAUSE I DON'T KNOW WHAT
STUDY
21 WE ARE TALKING ABOUT.
22
               MR. BROWN: Q. ALL RIGHT. IF YOU ARE NOT
SURE
23 ABOUT THE STUDY, WE HAVE TO MOVE ON.
24
              THE HAMMOND 1966 POPULATION STUDY, ACS CPS-I?
           A. I KNOW THAT ONE. YOU SAID 1996.
25
26
           Q. DID I?
27
              YES. I SAID I DIDN'T KNOW THE 1996, BUT I KNOW
           Α.
28
    THE EARLIER ONE.
4615
          Q. I DO THAT. I DO THAT FROM TIME TO TIME. I'M
1
     SORRY. 1966.
3
               WAS THAT STUDY STATISTICALLY FLAWED, IN YOUR
     OPINION?
5
      A. YES. AND IF YOU WANT, I'LL TRY TO EXPLAIN WHAT
 6
     SOME OF THE PROBLEMS WERE.
7
          Q. I'LL JUST MOVE ON AND FIND OUT HOW MANY STUDIES
8
     YOU THINK ARE FLAWED.
9
               HOW ABOUT THE KAHN, K-A-H-N, STUDY, 1966, WHICH
```

10 STUDIED U.S. VETERANS; ARE YOU FAMILIAR WITH THAT STUDY? 11 A. I HAVE READ IT. IT'S BEEN A WHILE. 12 Q. DID YOU COME TO A CONCLUSION THAT STATISTICALLY 13 THAT WAS A FLAWED STUDY? 14 A. I DON'T HAVE A SHARP RECOLLECTION, BUT I HAVE 15 ENOUGH RECOLLECTION TO BELIEVE THAT IT WOULD HAVE SUFFERED 16 FROM THE SAME KIND OF CONFOUNDING PROBLEMS THAT I DESCRIBED 17 HERE TODAY. 18 Q. OKAY. HOW ABOUT A STUDY BY THE CANADIAN 19 DEPARTMENT OF NATIONAL HEALTH AND WELFARE OF CANADIAN MALES, 20 AND THAT TOOK PLACE IN 1966; ARE YOU FAMILIAR WITH THAT 21 STUDY? 22 A. THAT ONE DOESN'T RING A BELL. 23 Q. ALL RIGHT. HOW ABOUT AN AUTHOR NAMED CEDERLOF 24 AND OTHERS, A 1975 POPULATION STUDY OF MALES AND FEMALES TWO SUBGROUPS REGARDING SMOKING AND LUNG CANCER? 25 26 A. I DON'T RECOGNIZE IT FROM WHAT YOU SAY. Q. DOLL AND PETO, 1976, P-E-T-O, BRITISH MALE 27 28 PHYSICIANS? 4616 A. THAT'S THE ONE I WAS TALKING ABOUT EARLIER. 1 2 Q. OKAY. I WAS REFERRING TO ONE IN THE '50S.

3 A. WE GOT MIXED UP. 4 Q. LET'S GO BACK THEN TO THE -- YOU THOUGHT YOU WERE TALKING ABOUT THE 1976 STUDY. 5 6 LET ME TAKE YOU BACK TO THAT ONE IN THE '50S 7 WHERE DOLL DID A STUDY ON THE LUNG CANCER BEING CAUSED BY 8 SMOKING. 9 DID YOU HAVE ANY -- EVER FORM AN OPINION THAT 10 THAT STUDY BY SIR RICHARD DOLL WAS FLAWED STATISTICALLY? 11 A. I REMEMBER -- I DON'T REMEMBER SPECIFICALLY, 12 BECAUSE IT'S BEEN A LONG TIME SINCE I HAVE READ THAT. 13 BUT MY MEMORY IS SHARP ENOUGH TO SAY THAT THERE 14 WERE A LOT OF PEOPLE WHO POINTED OUT CONCERNS ON THOSE EARLY 15 1950 STUDIES, SERIOUS PROBLEMS. 16 Q. LET'S MOVE UP TO DOLL AND PETO, 1976, BRITISH 17 MALE PHYSICIANS. 18 DID YOU HAVE -- ARE YOU FAMILIAR WITH THAT ONE? 19 I THINK YOU SAID YOU WERE. 20 A. YES. IN FACT, WE DISCUSSED THAT ONE. 21 Q. IS THAT ONE YOU THOUGHT WAS FLAWED STATISTICALLY? 22 A. IT SUFFERS FROM SOME OF THE SAME PROBLEMS I 23 DISCUSSED HERE TODAY, YES.

24 Q. ALL RIGHT. DOLL AND SOME OTHERS DID A STUDY IN Q. ALL RIGHT. DOLL AND SOLUTION 25 1980 ON BRITISH FEMALE PHYSICIANS. 26 ARE YOU FAMILIAR WITH THAT ONE? 27 A. WHAT YEAR? 28 Q. 1980. 4617 1 A. I THINK I'VE SEEN THAT. Q. HAVE YOU FORMED AN OPINION AS TO WHETHER THAT STUDY WAS STATISTICALLY FLAWED? 3 4 A. I DON'T REMEMBER THAT ONE WELL ENOUGH. 5 Q. ALL RIGHT. 6 A. BUT IF CAUSE WAS A CONCLUSION, THEN I WOULD POINT 7 OUT A FLAW. IF ASSOCIATION WAS THE CONCLUSION, THEN IT MAY 8 BY OKAY. Q. I'M SORRY? 9 10 A. THE FLAW IS NOT THE STUDY. IT'S WHAT YOU 11 CONCLUDE, PERHAPS ERRONEOUSLY, FROM THE STUDY. 12 IF THE CONCLUSION WAS THERE WAS AN ASSOCIATION 13 OF, SAY, SMOKING WITH HIGHER MORTALITY, THAT'S JUST A FACT. 14 I OBSERVED IT MYSELF. 15 BUT THE FLAW COMES IN WHEN YOU GET AN 16 OVERREACHING INTERPRETATION OR CONCLUSION IN THE ARTICLE

17 THAT EITHER TRIES TO CLAIM ITS CAUSE OR TRIES TO SAY THAT 18 THE EXCESS OF COMBINATION. THE EXCESS OF DEATHS IS ONE THING ONLY AND NOT A 20 Q. ARE YOU SAYING THAT IF A STUDY IS STATISTICALLY FLAWED, THEN THE CONCLUSIONS THAT THE AUTHORS OR CONDUCTORS 22 OF THE STUDIES MAKE WITH REGARD TO FINDING CAUSATION IS ALSO 23 FLAWED? A. ANY --24 25 MR. FURR: NO OBJECTION TO THE QUESTION, BUT I 26 WANT TO BE CLEAR AS TO THE DOOR BEING OPENED BY THIS 27 QUESTION. 28 MR. BROWN: THAT'S NOT TRUE. 4618 1 I'M TALKING --THE COURT: I'M NOT GOING TO RULE WHETHER IT'S 2 3 TRUE OR NOT. I'M GOING TO LET YOU ASK THE QUESTION. I WILL 4 DETERMINE WHETHER IT OPENS THE DOOR OR NOT LATER. 5 HE'S JUST TELLING YOU HE'S GOING TO MAKE THAT 6 CLAIM. I DON'T HAVE AN OCCASION TO MAKE ANY RULINGS RIGHT 7 NOW, BECAUSE THERE IS NO OBJECTION.

8	SO YOU GO AHEAD, IF YOU WISH TO.
9	MR. BROWN: LET ME ASK THIS QUESTION. I WILL
10	WITHDRAW THE OTHER ONE.
11	Q. YOU'RE NOT QUALIFIED TO GIVE US CAUSATION ON
ANY	
12	ASPECT WHATSOEVER OF LUNG CANCER, ARE YOU?
13	A. EXCEPT ONE ASPECT THAT I'D BE GLAD TO CLARIFY
14	WITH YOU, IF YOU LIKE.
15	Q. HAVEN'T YOU TESTIFIED TODAY IN THIS COURT THAT
16	WHEN YOU CAME IN HERE, YOU DIDN'T INTEND TO TESTIFY AS TO
17	CAUSATION?
18	A. WHAT I HOPE I SAID WAS THIS: THAT I HAD NO
19	OPINION AS TO WHETHER ANY RISK FACTOR CAUSED ANY DISEASE
OR	
20	DEATH. THAT WAS TRUE THEN AND IS TRUE NOW.
21	BUT AS A STATISTICIAN, I KNOW WHETHER IT'S
PROPE	R
22	TO REACH CAUSAL CONCLUSIONS. I KNOW THE SAME THING YOUR
SON	
23	KNOWS, THAT CORRELATION IS NOT CAUSATION. I KNOW THAT.
24	Q. ALL RIGHT. LET ME GO BACK TO THESE STUDIES.
25	HOW ABOUT
26	THE COURT: IN FIVE, TEN MINUTES, JUDITH IS
27	GOING TO NEED A RECESS.
28	MR. BROWN: WE COULD STOP RIGHT HERE.

```
4619
1
                THE COURT: YOU WANT TO STOP RIGHT HERE?
                MR. BROWN: THIS IS FINE.
THE COURT: THIS HAS BEEN A RATHER LONG
 2
 3
    SEGMENT. LET'S GO FOR A LITTLE OVER 20 MINUTES, TO
OUARTER
     TO 4:00.
 6
                PLEASE CONTINUE TO FOLLOW THE ADMONITION.
WE'LL
7 SEE YOU BACK AT QUARTER TO 4:00.
 8
                (RECESS TAKEN FROM 3:20 TO 3:48 P.M.)
 9
                THE COURT: I THINK EVERYBODY IS HERE, AND WE
10 ARE READY TO GO, MR. BROWN.
11
               MR. BROWN: I'M JUST ABOUT THROUGH.
12
           Q. PRELIMINARY TO MY QUESTION, I JUST WOULD ASK
YOU
13
     THIS: YOU HAVE CRITICIZED HERE, IN DIRECT AND ON
14
    CROSS-EXAMINATION, THE CPS-II, THE CDC, THE DOLL STUDIES,
15
     SELIKOFF AND SOME OTHERS.
                AND WHAT I'D LIKE TO ASK YOU IS THIS: HAVE YOU
16
17 EVER PUBLISHED YOUR CALCULATIONS UPON WHICH YOUR
CRITICISMS
18 ARE BASED IN ANY SCIENTIFIC JOURNALS IN WHICH YOU WERE
19
     SUBJECTED TO PEER REVIEW, OR HAVE YOU JUST PRESENTED THIS
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20 THEORY OF YOURS IN COURTROOMS LIKE THIS ONE? 21 A. THE BASIC IDEA OF CONFOUNDING IS TO BE FOUND IN 22 NUMEROUS ARTICLES OF MINE. 23 IF YOUR QUESTION IS FOCUSED ON A PARTICULAR 24 EXHIBIT THAT I HAD HERE TODAY, THAT HAS NOT EVER BEEN 25 SUBMITTED TO A JURY, BECAUSE IT'S NOT APPROPRIATE STUFF FOR 26 A JURY. 27 I'M AN EDITOR, I KNOW THAT, BUT I HAVE SUBMITTED 28 IT TO LAWYERS, WHO HAVE THE OPPORTUNITY TO REVIEW IT AND 4620 1 TELL ME IF THEY THINK IT'S WRONG. Q. YOU KNOW WHAT A PEER-REVIEW ARTICLE IS, DON'T 3 YOU, DOCTOR? Α. Q. YOU KNOW THAT WHEN YOU WRITE AN ARTICLE FOR A 5 6 PEER-REVIEW JOURNAL, THAT SOME VERY CAPABLE PEOPLE LOOK AT 7 IT TO DETERMINE WHETHER THE PROPOSED ARTICLE HAS MERIT? YOU KNOW THAT? 8 9 YES. Α. 10 Q. NOW, THE QUESTION IS: HAVE YOU EVER SUBMITTED 11 FOR PUBLICATION TO A PEER-REVIEW JOURNAL AN ARTICLE OR A 12 PAPER WHICH CRITICIZES ANY OR ALL OF THESE STUDIES THAT I

13 LATD	HAVE MENTIONED AND YOU'VE TESTIFIED ABOUT IN WHICH YOU
	OUT YOUR CALCULATIONS AND WHY THESE STUDIES WERE FLAWED?
15	A. I'M THINKING, SO I CAN BE RESPONSIVE. I KNOW
16	THAT'S MY OBLIGATION HERE, BUT THE QUESTION HAS NOT A LOT
OF	
17	PIECES TO IT.
18	I HAVE LAID OUT IN A PUBLICATION THE PRINCIPLES
19	THAT I HAVE DISCUSSED TODAY, BUT I HAVE NOT PUT IN A
20	PUBLICATION THE PARTICULAR NUMBERS THAT ILLUSTRATE THE
21	PRINCIPLES THAT WE HAVE USED TODAY.
22	AND IF I GOT IF I GOT THOSE AS AN EDITOR, I
23	WOULDN'T PUBLISH THEM, BECAUSE THAT'S NOT THE STUFF OF A
24	SCIENTIFIC ARTICLE.
25	Q. WOULD YOU CONCEDE THAT THE SOURCES OF
INFORM	MATION
26	THAT YOU HAVE CRITICIZED HERE ARE VERY IMPORTANT IN THE
27	LITERATURE, FROM A STANDPOINT OF STATISTICS AND OTHERWISE?
28	A. YES, THEY'RE IMPORTANT, AND THEY'RE ACTUALLY
WELL	
4621	
	IINDERSTOOD.
2	THAT'S WHY THEY WOULDN'T GET PUBLISHED.
_	11111 2 11111 11101111 1110111111111111

THEY'	RE
3	PRETTY WELL UNDERSTOOD.
4	Q. RECOGNIZING IN THEORY IS IT YOUR TESTIMONY
5	THAT YOU HAVE NEVER PREPARED A PAPER WHICH PRESENTS THE
SAME	
6	CRITICISM YOU PROVIDED HERE TO A PEER-REVIEW PROCESS FOR
7	PUBLICATION AND THEN GOT PUBLISHED IN A PEER-REVIEW
JOURN.	AL?
8	A. THAT'S RIGHT. I HAVEN'T DONE THAT.
9	I PRESENTED THIS AS COURTROOM MATERIAL, AND I
10	PRESENTED IT TO YOU AND YOUR EXPERTS TO TAKE A LOOK AT,
BUT	
11	NOT A PEER-REVIEW JOURNAL.
12	MR. BROWN: DOCTOR, THANK YOU.
13	THE WITNESS: THANK YOU.
14	THE COURT: ANYTHING FURTHER?
15	MR. FURR: YES, YOUR HONOR.
16	
17	REDIRECT EXAMINATION
18	BY MR. FURR: Q. DR. WECKER, I'M NOT GOING
TO	
19	ASK YOU TO HELP ME SOLVE THE MYSTERY OF THE DEATH OF THE
20	COWS OVER THE CLIFF, BUT I DO WANT TO ASK YOU ANOTHER
21	QUESTION ABOUT PLAINTIFFS' EXHIBIT 1804.
22	THIS NUMBER FOR SMOKING ATTRIBUTABLE MORTALITY
23	THAT'S A NUMBER THAT WAS CALCULATED USING THE LEVIN

```
FORMULA?
24
           A. YES.
25
          Q. IS THAT A NUMBER THAT IS BASED UPON AN AUTOPSY
26 INVESTIGATION OF THE INDIVIDUALS INVOLVED IN THE STUDY?
27
             MR. BROWN: THIS GOES BEYOND THE SCOPE, YOUR
28 HONOR. I OBJECT TO THAT.
4622
1
                HE COVERED THIS ON DIRECT. I DIDN'T COVER IT
AT
2
     ALL.
3
                THE COURT: I THOUGHT THERE WAS AN OBJECTION
 4
     THAT WE DIDN'T GET INTO IT.
5
                MR. FURR: NO, YOUR HONOR.
6
                THE COURT: IS THAT A DIFFERENT ONE?
7
                MR. FURR: THIS IS THE LAST QUESTION.
8
                THE COURT: I THOUGHT YOU OBJECTED TO IT.
                MR. FURR: NO. MR. BROWN: I OBJECTED TO THAT SHOWING
9
10
11 CAUSATION, AND THAT WAS THE END OF IT. NEVER ASKED.
                THE COURT: I THINK MR. BROWN HAD OBJECTED TO
12
13
     THE LAST QUESTION YOU WERE GOING TO ASK HIM ABOUT THIS,
AND
14 I SUSTAINED THAT. RIGHT?
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15
                MR. FURR: NO, YOUR HONOR. I DON'T WANT TO
16 ARGUE IN FRONT OF JURY.
17
               THIS IS MY LAST QUESTION. I CAN EXPLAIN IT
VERY
18 QUICKLY.
19
                THE COURT: GO AHEAD. ASK IT AGAIN.
20
                MR. BROWN: THE LAST QUESTION EXCEPTION.
                THE COURT: IT'S GOING TO BE VERY EFFECTIVE.
21
                \ensuremath{\mathsf{MR}}\xspace. FURR: I HAVE LEARNED THE LAST QUESTION
22
23 EXCEPTION WHILE I HAVE BEEN IN CALIFORNIA.
24
                THE COURT: YOU CAN ASK IT AGAIN. SEE IF
THERE
25 IS AN OBJECTION.
               MR. FURR: Q. WAS THIS NUMBER BASED UPON AN
26
26 MR. FURR: Q. WAS TO
27 INVESTIGATION OF AUTOPSY REPORTS?
28
      A. NO.
4623
1
                MR. BROWN: OBJECTION.
2
                THE WITNESS: NO.
3
                MR. BROWN: FOUNDATION, AND BEYOND THE SCOPE
OF
4 THE CROSS-EXAMINATION.
                THE COURT: BEYOND THE SCOPE. GIVEN THIS ONE
5
6 QUESTION, I'M GOING TO OVERRULE THAT. HE'S SAYING IT
LACKS
```

```
7
    FOUNDATION.
 8
                I'LL LEAVE THE ANSWER IN. BUT ASK HIM HOW HE
 9
     KNOWS, AND THEN I'LL EITHER LEAVE IT IN OR NOT, DEPENDING
ON
10
    WHAT HIS ANSWER IS.
11
               MR. FURR: Q. DR. WECKER, HOW DO YOU KNOW
THIS
12
     NUMBER WAS NOT BASED ON AUTOPSY REPORTS?
13
     A. BECAUSE I KNOW IT'S BASED ON -- ONLY ON THE
LEVIN
14
    FORMULA, BECAUSE I READ THE ARTICLE I'M HOLDING IN MY HAND
    (INDICATING). THAT MADE IT CLEAR.
15
16
           Q. COULD YOU JUST READ THE TITLE OF THE ARTICLE.
17
           A.
                "CDC MORTALITY MORBIDITY, WEEKLY REPORT, AUGUST
18 17, 1993."
19
                MR. FURR: OKAY.
20
                MR. BROWN: OBJECTION. HEARSAY.
21
                THE COURT: SUSTAINED.
22
                MR. FURR: THANKS VERY MUCH.
                THE COURT: THAT'S HEARSAY. I'M GOING TO
23
STRIKE
24 THE ANSWERS TO THE LAST TWO QUESTIONS. IT'S BASED ON
25
    HEARSAY.
26
                MR. FURR: THANK VERY MUCH, DOCTOR.
27
                THE WITNESS: THANKS.
28
                MR. BROWN: NO QUESTIONS.
```

4624 1 2	THE COURT: OKAY. MAY THE DOCTOR BE EXCUSED? MR. BROWN: YES, HE CAN.
3	THE COURT: YES.
4	MR. FURR: YES, YOUR HONOR.
5	THE COURT: YOU ARE EXCUSED.
6	(WITNESS EXCUSED)
7	MR. HARDY: YOUR HONOR, I THINK, NEXT, WE'LL
8	READ FROM THE DEPOSITION OF DR. KIN JUNG.
9	THE COURT: WHY DON'T YOU GIVE THE NAME AND
DATE	
10	OF THE DEPOSITION. SPELL THE NAME, PLEASE.
11	MR. HARDY: IT'S THE DEPOSITION OF KIN, K-I-N.
12	THE COURT: K-I-N?
13	MR. HARDY: YES. JUNG, J-U-N-G, M.D., FRIDAY
14	DECEMBER 3, 1999.
15	AND IT'S DEFENDANTS' EXHIBIT 4850.
16	(DOCUMENT MORE PARTICULARLY
17	LISTED IN THE INDEX MARKED
18	FOR IDENTIFICATION DEFENDANTS'
19	EXHIBIT # 4850)
20	MR. HARDY: I UNDERSTAND THE COURT'S PROCEDURE
21	IS JUDITH DOES NOT TAKE THIS DOWN. WE GIVE A COPY OF WHAT

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22 IS BEING READ TO TATSUO. AND THAT'S WHAT I'M DOING.
23
                THE COURT: IS THERE A COPY FOR THE COURT
THAT'S
24 MARKED FOR IDENTIFICATION?
25
               MR. HARDY: THERE IS A COPY HERE FOR THE
COURT.
26
                THE COURT: THANK YOU. AN EXTRA COPY.
27
                SO 4850 IS THE TRANSCRIPT OF WHAT'S BEING READ?
                MR. HARDY: YES, YOUR HONOR.
28
4625
 1
                THE COURT: OKAY. AND WE HAVE THE SAME
 2
      STIPULATION, MS. CHABER, ABOUT THE READING OF THIS?
 3
                MS. CHABER: YES.
 4
                THE COURT: SO I THINK --
 5
                MR. HARDY: WITH THE COURT'S PERMISSION, DAVID
 6 STOMP WILL COME UP AND PLAY THE ROLE OF DR. JUNG.
                THE COURT: OKAY.
 7
 8
                I THINK WE ARE READY TO GO OFF THE RECORD FOR
THE
9
     PURPOSE OF THE READING.
10
                MR. HARDY: YES, YOUR HONOR.
11
                (DEPOSITION READ)
12 THE COURT BACK 5...

THE READING OF DR. JUNG'S DEPOSITION.
WHAT'S NEXT?
                THE COURT: BACK ON THE RECORD. WE COMPLETED
```

```
15
                 MR. HARDY: I BELIEVE WE ARE GOING TO SHOW A
16 TAPE OF THE REBECCA ENLOW DEPOSITION.
17
                THE COURT: CAN YOU GIVE US THE SPELLING OF
THE
18 NAME AND THE DATE OF THE DEPOSITION, PLEASE.
                 MR. ESCHER: YES. IT'S REBECCA,
R-E-B-E-C-C-A,
L. ENLOW, E-N-L-O-W.
21
                 IT WAS TAKEN OCTOBER 19TH, 1999.
22
                 THE COURT: OKAY. AND THIS IS A VIDEO OF THE
23
     DEPOSITION YOU ARE GOING TO PLAY?
24
                 MR. ESCHER: THAT'S RIGHT, YOUR HONOR.
25
                 THIS IS ONE THAT HAS THE TWO ERRATA THAT WE'LL
26 HAVE TO READ WHEN WE GET TO THOSE POINTS.
27
                 THE COURT: WE'LL KEEP JUDITH AVAILABLE.
28
                 MR. ESCHER: DID YOU WANT A COPY OF IT TO READ
4626
 1
     ALONG?
 2
                 THE COURT: ARE WE GOING TO MARK FOR
 3
      IDENTIFICATION BOTH THE TRANSCRIPT AND THE VIDEOTAPE?
                 MR. ESCHER: YES. I THINK SO, YOUR HONOR. THE COURT: OKAY. WHY DON'T WE DO THAT. MR. ESCHER: WE'VE MARKED AS 4851 THE
 5
 6
```

DEPOS	ITION
7	TRANSCRIPT OF REBECCA ENLOW.
8	(DOCUMENT MORE PARTICULARLY
9	LISTED IN THE INDEX MARKED
10	FOR IDENTIFICATION DEFENDANTS'
11	EXHIBIT # 4851)
12	THE COURT: AND THAT SHOWS THE PORTIONS THAT
ARE	
13	GOING TO BE PLAYED?
14	MR. ESCHER: YES, YOUR HONOR.
15	AND THE VIDEOTAPE ITSELF HAS BEEN MARKED AS
16	4851-A.
17	(ITEM MORE PARTICULARLY
18	LISTED IN THE INDEX MARKED
19	FOR IDENTIFICATION DEFENDANTS'
20	EXHIBIT # 4851-A)
21	THE COURT: PURSUANT TO THE STIPULATION, WE
ARE	
22	
23	•
24	•
25	
26	WE CAN GO OFF THE RECORD.
27	(VIDEOTAPE SHOWN)
28	THE COURT: WE ARE ON THE RECORD. WE

4627	
1	INTERRUPTED THE VIDEO.
2	MR. ESCHER WANTS TO SAY SOMETHING.
3	MR. ESCHER: YES, YOUR HONOR. I TRIED TO STOP
4	IT IN TIME, RIGHT AFTER THE QUESTION: "OR COULD BE TERMED
5	ADDICTIVE, CORRECT?"
6	THE VIDEOTAPE WENT INTO THE ANSWER TO THE
7	FOLLOWING QUESTION, AND IT SHOULDN'T HAVE, AND IT WAS
8	DELETED, BECAUSE THERE'S AN ERRATA TO THE ANSWER THAT'S IN
9 10 BE	THE DEPOSITION TRANSCRIPT ITSELF WITH RESPECT TO THE QUESTION OF: "COULD CREATE A STRONG DEPENDENCE OR COULD
11	TERMED ADDICTIVE, CORRECT?"
12	THE ERRATA, AND THE ANSWER IS: "YES I THINK
DID	
13	UNDERSTAND THAT."
14	THE COURT: OKAY. WE CAN GO OFF THE RECORD
AND	
15	CONTINUE PLAYING THE VIDEO.
16	(VIDEOTAPE SHOWN)
17	MR. ESCHER: I HAVE TO READ FROM THE ERRATA
18	AGAIN, YOUR HONOR.
19	THE COURT: OKAY.
20	MR. ESCHER: THE ANSWER IS: "17 YEARS AGO, WE

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21
                DISCUSSED QUITTING SMOKING BECAUSE IT WAS/IS
22
                SUPPOSED TO BE DANGEROUS TO YOUR HEALTH AND MY
23
                UNBORN BABY. I REMEMBERED THAT AFTER I REREAD
24
                THE QUESTION IN THE DEPOSITION BOOKLET AND MR.
25
                BARRON'S LAST REMARKS ON PAGE 116, LINE NO. 4."
                THAT'S IT.
26
27
                THE COURT: DOES IT SAY PAGE 160?
                MR. ESCHER: PAGE 116, LINE NO. 4.
28
4628
1
                THAT'S IT FOR THE ERRATA, YOUR HONOR.
                MS. CHABER: BUT YOU'RE PLAYING THE ANSWER?
 2
3
                MR. ESCHER: I DON'T BELIEVE SO. I NEED TO
4
    DOUBLE-CHECK.
5
                IT WASN'T INDICATED TO BE PLAYED ON THE
6
     TRANSCRIPT.
7
                MS. CHABER: YES. IT WAS SUPPOSED TO BE
PLAYED
8 AND THEN THE ERRATA WAS SUPPOSED TO BE DISCUSSED.
9
                THE COURT: THE PROPER WAY TO DO THIS IS TO
READ
10 THE ORIGINAL ANSWER AND THEN TO READ THE CHANGE.
11
                MR. ESCHER: I'M HAPPY TO DO THAT NOW, YOUR
12 HONOR.
13
                THE COURT: WE'LL READ THE QUESTION ON THE
14 RECORD.
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15 16 PART		YOU GO AHEAD AND DO IT. MS. CHABER: I WILL DO THE READING ON THIS
17	BECAUSE IT	'S MY QUESTION.
18	DECITORE II	THE COURT: LET'S JUST BE CLEAR ABOUT WHAT THE
19	ORIGINAL A	NSWER WAS AND
20		MS. CHABER: THAT'S WHAT
21		THE COURT: LET ME FINISH, COUNSEL, PLEASE.
22		LET'S JUST BE CLEAR ON THE RECORD WHAT THE
	ORIGINAL A	NSWER WAS AND WHAT THE CHANGE WAS.
24	NT 7 T	SO MS. CHABER, YOU ARE GOING TO READ THE
ORIGI	NAL ANSWER?	
26	ANSWEK:	MS. CHABER: YES.
27		THE COURT: OKAY.
28		MS. CHABER: "QUESTION: HAS LESLIE EVER
TALKE	D	
4629		
4029 1		TO YOU ABOUT WHETHER OR NOT SHE BELIEVES SHE'S
2		ADDICTED TO CIGARETTE SMOKING?
3		"ANSWER: YES.
4		"QUESTION: WHAT WAS THE CONVERSATION THAT
5		YOU'VE HAD ABOUT THAT?

6		"ANSWER: WE DISCUSSED IT BECAUSE WE HAD BOTH
7		DISCUSSED QUITTING. AND WE ATTEMPTED IT, OR I
8		HAD. PRETENDED TO. IT'S DIFFICULT.
9		"WHAT SHE SAID WAS SHE THOUGHT IT WAS SHE
HAD		
10		HEARD THAT IT WAS HARDER TO QUIT SMOKING THAN
TO		
11		QUIT USING DRUGS THAT YOU LIKE HEROIN, THAT
YOU		
12		GET ADDICTED TO. SHE HAD READ IT IN A
MAGAZ	INE,	
13		I THINK."
14		AND THEN THERE IS THE ERRATA.
15		THE COURT: NOW, DO YOU WANT TO READ THE
CORRE	CT	
16	ONE?	
17		MR. ESCHER: YES, I WILL READ THE CORRECTED
18	ANSWER, YO	OUR HONOR, WHICH IS AS FOLLOWS:
19		"17 YEARS AGO, WE DISCUSSED QUITTING SMOKING
20		BECAUSE IT WAS/IS SUPPOSED TO DANGEROUS TO YOUR
21		HEALTH AND MY UNBORN BABY. I REMEMBERED THAT
22		AFTER I REREAD THE QUESTION IN THE DEPOSITION
23		BOOKLET AND MR. BARRON'S LAST REMARKS ON PAGE
24		116, LINE NO. 4."
25		THE COURT: OKAY. SHALL WE RETURN TO THE
26	VIDEO?	

27 28	MR. ESCHER: YES.
28	THE COURT: OKAY. OFF THE RECORD.
4630	
1	(VIDEOTAPE SHOWN)
2	THE COURT: BACK ON THE RECORD.
3	THAT COMPLETES THE READING OF THE DEPOSITION
4	OR EXCUSE ME THE PLAYING OF THE VIDEOTAPE DEPOSITION OF
5	MS. ENLOW.
6	MR. HARDY: I THINK THAT'S ALL WE HAVE FOR
7	TODAY.
8	THE COURT: OKAY. IF YOU WANT TO TALK WITH
EACH	
9	OTHER, YOU CAN COME UP WITH THE ANSWER AS TO WHAT TIME YOU
10	WANT TO START TOMORROW AND TO HAVE THE JURY. WHATEVER
TIME	
11	YOU PICK, WE'LL START.
12	DO YOU WANT TO TALK TO EACH OTHER ABOUT IT?
13	(ATTORNEYS CONFER)
14	THE COURT: IN THE MEANWHILE, JURORS, OVER THE
1 -	THENTIA DI DI CI COMPINIO DO DOLLOU EUR ADMONTETON MON
15	EVENING, PLEASE CONTINUE TO FOLLOW THE ADMONITION. YOU
KNOW	TELO ADOLUEDIN ODIETOAI ENAE NOU DO CO
16	
17	MR. HARDY: 9:00 O'CLOCK.

18	OKAY, JURORS. WE ARE GOING TO START TOMORROW
AT	
19	9:00 O'CLOCK.
20	HAVE A GOOD EVENING. WE'LL SEE YOU TOMORROW AT
21	9:00 O'CLOCK.
22	(THE PROCEEDINGS ADJOURNED AT 4:50 P.M.)
23	
24	
25	
26	
27	
28	

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